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Gendered Spaces and Digital Discourse: Framing Women's Relationship with the Internet

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Gendered Spaces and Digital Discourse:
Framing Women's Relationship with the Internet

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Gendered Spaces and Digital Discourse:
Framing Women's Relationship with the Internet

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While access to the Internet in the United States has reached parity amongst males and females, over time, gender differences in terms of usage, agency, and representation with technology are becoming evident. Early thinking about the Internet indicated a more liberating and equalizing effect than previous media, due to its decentralized nature, reduced structural barriers to entry, and potential for diversity of voices. But over time, mainstream sites that have been developed for women are primarily interested in their value as consumers. Many sites have adopted a women's magazine model, using essentially feminine stereotypes to promote and position their content. This includes the ways in which these sites represent the ideas of technology and the Internet. This study maps the history and background of women's Web sites and then identifies the relevant frames that the main players use around the Internet. Identification of sites that provide

alternate discourses provide a basis for discussion of spaces of resistance and opportunities for alternate meaning making around women's relationship with Internet technology.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

Over the past decade, the number of women using the Internet has greatly increased from a quiet minority to an equally represented demographic. In September 2001, the percentage of U.S. males and females had reached equity, with roughly 53% of both men and women having online access (Department of Commerce, 2002). In 2004, it was estimated that 66% of men and 61% of women were online, with more women online than men in total due to their increased numbers in American society ("Internet: The Mainstreaming of Online Life," January 2005). It is no coincidence that the increase of female Internet users has come at a time when the Internet and related technologies, such as email and Web, were gaining mainstream acceptance. Today, there are 128 million Internet users in the United States, and on a typical day, more than 70 million people are expected to go online to check email or surf the Web ("Internet: The Mainstreaming of Online Life," January 2005). But before the mid- 1990s, the Internet was characterized as a primarily white, male domain, used by those in privileged positions in academia, government, and the military. Arguably, these origins have shaped the way the technology has been viewed and accepted by society.

While access to the Internet in the United States has reached parity amongst males and females, over time, gender differences in terms of the ways one uses the technology, agency associated with such usage, and the representations created within technology are becoming evident. A comScore Media Metrix report in September 2003 studied the Internet content preferences of males and females aged 18-24. The study found that men

were more likely to visit gaming, adult, sports, and entertainment sites, while women's interests were in a variety of retail categories (comScore Networks, October 2003). Another comScore report showed that the highest growth sites were those in the retail category, also highlighting the growth of women Internet users (comScore Networks, Inc. November 2004). A 2005 study by the Pew Internet and American Life Project, revealed that women were more likely to seek health information, get religious and spiritual information, and use support-group Web sites, while men were more likely to use the Web to get news, buy travel services, check sports scores, seek financial information and do online stock trading, participate in online auctions, create content for the Internet, and download music files ("Internet: The Mainstreaming of Online Life," January 2005).

Simply paying attention to access does not highlight other types of divides around gender, as in the frequency and quality of usage, the different ways and purposes in which the technology is employed, and the ways women's usage of technology is represented (Odell et al., 2000; Sherman et al, 2000; Weiser, 2000; Bimber, 2000; Howard, Rainie & Jones, 2001; Jackson, Ervin, Gardner, & Schmitt, 2001; Boneva, Kraut & Frohlich, 2001; Shaw & Gant, 2002). When the Internet first began gaining mainstream acceptance, popular culture and the media tended to position women as techno-phobic and victims of online harassment and stalking (Shade, 2003, p. 59). Nor does a focus on domestic access shed light on the existence of gender divides across nations and cultures outside of the US (Pastore, 2000). And with many articles and studies characterizing the gender divide as all but eliminated, attention is diverted from other types of divides that are based on gender (Beiles, 1999; Guy, 1999; "Internet

Gender Gap Narrowed...," January 2000; "U.S. Women Surging Online…," 2000; Van Slyke, Communale & Belanger, 2002; "Tracking Online Life," 2000; Tedechi, 1999). The purpose here is to identify trends in content that can contribute to different attitudes about using Internet technology, thus creating divides beyond access in terms of usage, agency, and representation.

At the heart of this analysis is understanding the ways in which Internet technology was diffused to and adopted by women. Diffusion as defined by Rogers is "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 2003, p. 5). By understanding the elements of this process, one can begin to assess the factors that influence access to and usage of the technology. In further elaborating on the diffusion process, Rogers listed characteristics that affect the rate of adoption of an innovation, two of which included compatibility – or the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters, and complexity – the degree to which an innovation is perceived as difficult to understand or use (Rogers, 2003, pp. 15-16). These characteristics provide evidence as to why certain discourses have been chosen by media to encourage and promote women's usage of Internet technology.

DEFINITION AND BACKGROUND OF INTERNET TECHNOLOGY

A clear definition of the technologies under analysis is necessary. The Internet is the collection of inter-connected networks that use TCP/IP protocols and that evolved from the ARPANET of the late 1960s and early 1970s. The World Wide Web is a system

of Internet servers that uses the hypertext transfer protocol (HTTP) to transfer documents formatted in a language known as Hypertext Mark-up Language (HTML). HTML supports links to other documents, as well as graphics, audio, and video files. Hyperlinking in documents allows users to jump from one document to another (Castells, 2001, pp. 10-15). The Web did not gain in widespread popularity until the early 1990s, when Tim Berners-Lee, a Swiss physicist, developed the HTML language and created the first rudimentary browser, a software program that interprets and displays HTML documents to users. Soon thereafter, the Mosaic browser was developed at the University of Illinois by Marc Andreeson, and was made available for download on the Web. Mosaic later became Netscape, and at this point, anyone with an Internet connection, a Web host, and some cursory knowledge of HTML could create and publish a Web site that is available to anyone with access to the Internet. With only 23 hosts on the Internet in 1971, the search engine Google now indexes over 8 billion Web pages. There are millions of personal Web sites, as well as pages focused on educational, political, or commercial endeavors. And with the rise of Web logs or "blogs," technology is making it easier for anyone who has something to share to be able to do so online.

This study will focus on Web content that is created by media companies for mass audiences targeted at a gendered demographic. In some cases, these sites host discussion boards that allow users to post comments, ask questions, or engage in online discussions with other users. This type of content will be described, but will not be the main focus of

this project. The focus will be on content created by the sites and the ways that women's relationship with the Internet is represented.

GENDERED SPACES

For the purpose of this analysis, an online gendered space is defined as a Web site that is designated for a specific gender either through title or indirectly via its mission and content. Since the mid-'90s, Web sites have been developed that target women as a demographic category, providing content specific to the female audience. A directory search of Google under the category of Society>People>Women yielded 29 sites that were generally targeted at females with 33 sub-categories including Business, Mothers, Feminism, and Politics. The Feminism sub-category included 71 sites. For men, the category Society>People>Men displayed only two general purpose men's sites, but included 19 sub-categories including Fathers, Bachelors, Husbands, Issues, and Men's Health. Chapter 5 includes an overview of sites targeted at women and one comparable site targeted at men.

While early sites for women were lauded for their equalizing and democratic potential, the mainstream sites of late seem primarily interested in women's value as consumers. These sites are less concerned with providing content that offers an alternative to traditional media than with driving traffic to their sites using established marketing strategies. Since women must use Internet technology to access the information on these sites, considering how these sites are defining women's roles with the Internet sheds light on the ways that women can visualize their own usage, in essence constructing their relationship with the technology. Many sites, such as iVillage, the

most popular women's Web site, have taken a women's magazine model, using essentially feminine stereotypes in describing women's relationship with the Internet, particularly in their roles as parents or consumers. The discourses around technology are being modified to encourage the adoption of Internet technology by women, thus creating a distinct women's digital discourse that often contradicts and conflicts with what can be considered the traditional discourse of technology. These discourses will be explored further throughout this analysis.

The Internet has provided an outlet for various types of expression by women. Both men and women have created thousands of personal Web sites to communicate family, hobby, academic, or personal information. And activists have utilized the Internet to spread news of their causes and to recruit volunteers. Many sites that are not overtly targeted toward women, like parenting or health sites, certainly draw a strong female clientele. Young women have made a mark on the Web, with sites focused on the music and technology communities abounding online. But as the Internet has grown in popularity and mainstream acceptance, sites for women with more commercial motivations in mind started emerging.

According to comScore, women's sites attracted 34.8 million visitors in December 2002. comScore data also show that women's sites are broadly appealing to females of virtually all age groups. In fact, the Women's category reached approximately 30% of total female Internet users age 25 to 64. Females under age 18 were noticeably less prone to visit the category, likely due to the limited attraction of family and home-related content, which is common throughout the category. Also, the comScore report

indicated that women living in smaller households were more likely to visit women's sites. While women living alone make up the smallest segment of Women's site users, this category reach 38% of those women ("iVillage Named A Top 10 Online Publisher…," 2003).

But the Web may not provide equal opportunities for all women and it has increasingly become a vehicle for marketing and consumerism. What is clear is how the Internet has become increasingly feminized. Web content has been designed and created for a particular audience of women – middle to upper class white women. This includes portals adopting a magazine-type format featuring health, beauty, cooking, parenting, and shopping tips; "interactive" discussion forums; quizzes; and e-commerce ventures (e.g., clothes, makeup, toys). An example of this is iVillage.com, whose partners include America Online, Clairol, Milano Cookies, Dewey Color System, and Maternity Mall. Other examples abound: Handbag.com, Oxygen.com and Women.com are just a few of these portal sites. The Internet is also becoming feminized via the design of multimedia products where ideas about female gender are incorporated into the process (Shade, 2003, pp. 64-65*)*.

The most popular online site for women is iVillage.com. Adding the tag line "The Internet for Women" in 2003 (See Figure 1-1), iVillage.com has staked its claim as the definitive Web site dealing with women's issues online, with sections on parenting and pregnancy, health and fitness, beauty and relationships, home, money, and many other topics deemed important to women. iVillage is the only women's Web site that now regularly appears on the comScore Media Metrix Top 50 Web Properties, ranking at

#26 in October 2004 with over 16 million unique visitors during that month (comScore Media Metrix, November 2004). Women.com was originally a separate entry in the women's Web category, but has since been acquired by iVillage to round out its offering. And sites that have broadcast media companions like Oxygen.com, Lifetime.com, and Oprah.com offer content that supports and extends their other contributions.

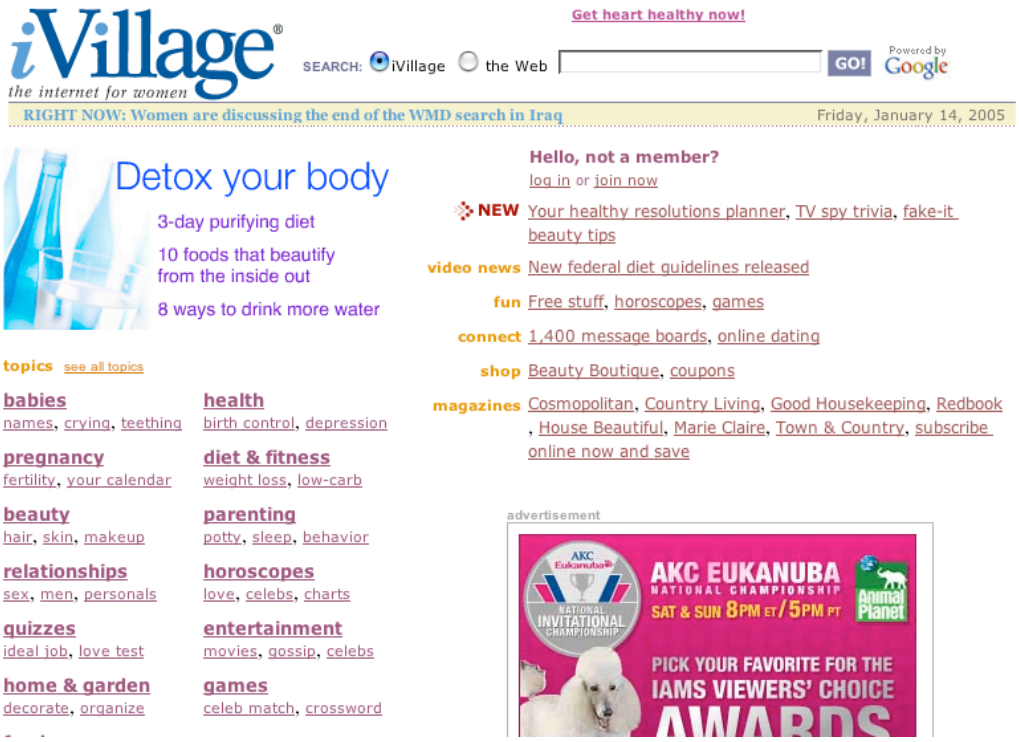


Figure 1-1: iVillage home page, January 14, 2005

The Web also offers an outlet for media in the feminist realm. Msmagazine.com offers a complement to the *Ms Magazine* print medium. The National Organization for Women (NOW) hosts a Web site at NOW.org to help communicate its messages and raise funding, and various other sites support feminist ideas and missions including Feminist.com, Feminista.com, and Feministmajority.org.

But some researchers, as of late, point out the lost potential of using the Internet for feminist purposes. Dr. Susan Herring of Indiana University said, "Back in the '80s and '90s, there was a lot of idealism in how the Internet was going to greatly facilitate feminist goals. Over the years, what we have seen…is that [women's website] content is becoming increasingly mainstream" (Pleticha, 2002).

Additionally, traditional women's print media provide entries into the Women's Web category with many women's magazines offering a Web companion. Most every women's magazine has a dotcom sister that offers the range of services from information about the publication, subscriptions, archived content, Web-specific content, and advertisements. Women's magazines themselves fall into several categories, some being primarily concerned with service, as in homemaking and entertaining, or beauty and fitness, health or parenting (McCracken, 1993).

An additional category of women's sites has to do with women creating spaces around their usage of technology. Sites like DigitalDivas.com, Cybergrrl.com, and GirlGeeks.org provide places for women that identify and discuss their relationship with computers and Internet technology. While these sites provide an alternative to the feminine and feminist discourses provided by other sites, each attracts a much smaller audience than that of the mainstream sites.

Even though iVillage.com is the only women's property that reaches a Top 50 audience, the value of sites that are demographically focused is not lost on market researchers. According to Anne Rickert of Media Metrix, "niche sites may not draw the most significant number of unique visitors overall, but they often boast a heavier

concentration of users from key demographic groups. For example, women in the 24 to 35 age bracket are most highly concentrated among sites offering content, advice, and community focused on childcare" (comScore, August 2000). Other market researchers are aware of the distinct purposes of women on the Web. "Women using the Internet tend to be focused on practicality. They don't waste much time on a variety of different sites but return to those which save them time or money," said Arielle Dinard, Managing Director of MMXI Europe. "The Internet is the ideal medium to distribute information about bargains and tips and tricks that can be posted immediately and made visible to all. Women understand this and increasingly use the Internet to make everyday life easier" (comScore, August 2000).

Shade recommended "it is important, then, to consider the wider issues of political economy if the existing patterns of ownership, control, representation, and creation of women's content on the Internet is to be understood and challenged" (Shade, 2002, p. 108). The assertion by Gersch that "the interrelation between science/technology, political economy, and culture accounts for different experiences of women and men in relation to the Internet because of particular discourses privileged in these areas" is balanced by her admission that the Internet can provide discursive spaces to challenge traditional discourses (Gersch, 1998). Other studies have addressed this double-edged message for women of the promise of the Internet balanced by its potential perils (Scott, Semmens & Willoughby, 1999; Morahan-Martin, 2000).

So, what should be made of the liberating potential of technology and its ability to challenge hegemonic discourses? If the Internet offers a different means of disseminating

content, then why are women's Web sites, even those that are not aligned with traditional women's media, reverting to the old strategies of family, beauty, and making life easier? And more importantly, why are women flocking to these sites? According to Charles Buckwalter of media firm Ad Relevance:

> The fun and convenience of going online is becoming increasingly important to a wide range of American women, from stay-at-home moms and career women to teens and students. When you consider how important these demographics are to advertisers, the Internet may not turn out to be 'the great equalizer' after all. On the contrary, women seem well on their way to outnumbering men in a medium that until recently was almost exclusively their own (Pastore, 2000).

A Salon article in 2000 lamented the initial potential of the Internet to enhance women's culture.

> In the early days of the Web, fledgling sites like Women.com (then called Women's Wire), iVillage and Cybergrrl.com promised to provide alternatives to the shallow women's glossies on newsstands. In a medium then heavily dominated by geek testosterone, these women's sites shone as tiny post-feminist havens, modeling themselves after general interest magazines but with a heavy emphasis on community and more politicized content (Brown, 2000).

Brown blamed this trend on the increased emphasis on the bottom line, but also on the perceived demand of women for this type of content.

> Half the Web may now consist of women, but what we are finding at the sites that are built with us in mind is often much of the same pabulum we'd get in *People* or *Seventeen* magazines. After all, iVillage has succeeded in drawing millions of women; teen girls flock to TeenPeople; Women.com provides those horoscopes because the women demanded them. It is, perhaps, not fair to blame women's media for a revolution that didn't happen. Maybe there weren't more than a handful of women who really wanted it in the first place (Brown, 2000).

Perhaps part of the problem is women's Web sites hesitancy to resolve the feminism issue. From the beginning, iVillage was clearly not feminist and decidedly focused on profit. In a piece for Salon, Janelle Brown said, "Of all the women's Web sites, it [iVillage] was the only one that was launched by a woman who wouldn't call herself a feminist" (Brown, 2000). Sites like Women.com, which had an original mission to offer intellectual content, have evolved to providing more fluff, celebrity gossip and sex columns. "We might be the intellectual elite looking for a more broad mix, but you have to look at a bigger population," says one early Women.com editor who watched Women's Wire evolve over the years into a very different beast. "In the beginning the mission was to deliver smart intellectual stuff that makes women richer. And they still do it, but there's a lot more fluff around it" (Brown, 2000). Now, part of the iVillage family, Women.com is nothing more than a tabloid-style publication for the Web.

A February 13, 2000 article in the *New York Times* discussed how little women have gained by the new technological medium, specifically referring to iVillage content.

> How dispiriting, then, to discover that what we've stolen is the chance to read an online women's magazine, far below whatever standard still prevails in the most dumbed-down print magazines, and with far less attractive graphics than *Martha Stewart Living*. The articles are short, vapid, carelessly written; the tone is Valley Girl friendly, relentlessly chipper and upbeat (Prose, 2000).

But the author continued that this is not simply an iVillage problem but something that is prevalent in our culture. "iVillage is only a symptom of the virulent cultural separatism currently generating a profusion of products and services created specifically for women," including not only women's Web sites and magazines, but also film,

television, books, and advertisements that pander to "so-called" women's interests (Prose, 2000).

Female readers interest in celebrity, sex, and fluff was documented in a Jupiter/Media Metrix report in 2000, which closely examined which sites women of all ages visited. The results included iBaby and Pampers.com, eStyle, Avon.com and OilOfOlay.com. There were no surprises among the most-visited women's community sites: iVillage topped the list, followed closely by the Women.com and Hearst sites OnHealth and ClubMom, and Oxygen.com. But the fact that none of the women's sites has become the primary destination of the majority of women indicates that maybe women weren't online looking for women's content in the first place (Brown, 2000).

So, how did women come to the Web and how did they learn about technology? One place to look is in traditional women's media, like women's magazines, to understand how the Internet was introduced to and adopted by women. An early *Cosmopolitan* article in 1996 discussed the benefits of online courtship. It emphasized the real life relationships that had begun online and resulted in marriage. An ending caveat warned women that online dating could also be dangerous (Aster, 1996). A later article in *Cosmopolitan* sought to provide an Internet tutorial for women (Forsyth, 1997). While this article provided valuable insight into the history and usage of the Internet, it was wrought with feminine stereotypes designed to make computing less intimidating. "If you think a Web site is located next to the spider's nest in the basement, this tutorial is for you!" or "The Net is still suffering growing pains and often works slowly. Consider doing your nails. You'll have plenty of time to let two coats of polish dry thoroughly

while you stare at messages such as 'Host contacted, waiting for reply'; 'Retrieving updated images'; and 'Approximate download time, 28 minutes.'" Additionally, the article focused on proper "netiquette" for newsgroups and warnings about the addictive nature of the Internet and the potential for wasting time.

Other publications like *Good Housekeeping* and *Redbook* proceeded in the mid-1990s to provide stories of the Internet as useful for helping children with homework (Berger, 1996) but quickly evolved to content that was designed to create fear, as in articles dealing with cyber-molestation and stalking, cyber-porn, and online scams and fraud (Trebilcock, 1997; Mansfield, 1998; Trebilcock, 1998; "Are you a netaholic?," 1999). Later articles turned toward more stereotypical content as in using the Internet for beauty secrets, staying in contact with friends and family, and shopping (Jones, 1998; King, 1998; Finnigan, 1998).

The magazine *Working Woman* was one publication that distinctly focused on women's business potential on the Web. This publication printed articles dealing with the usage of technology in work and business, and included profiles of successful women in technology, how to implement Web pages, and women's role in the information revolution. A special issue on "Wired Women: Making Technology Work for Us," was published in 1996, and a cover story in January 1996 focusing on Bill Gates discussed his feelings about women and technology (Povich, 1996).

But in 2001 and after 25 years in print, *Working Woman* folded, and its remaining property *Working Mother* was sold to Working Woman Media to continue in publication. The decision to focus on *Working Mother* was due to the slow economy and the tech

downturn (Lombardi, 2001). Content regarding the Internet on *Working Mother* has been more like the service magazines mentioned above, and when *Working Woman* was absorbed by *Working Mother*, the content on Internet technology became more focused on parenting and cyber-shopping. Further analysis of the Internet in women's print media is performed in Chapter 4, which looks at technology columns and articles *in Better Homes and Gardens, Ms. Magazine,* and *Working Woman* in the late 1990s.

In contrast, the first usage of the term Internet in the men's magazine *Esquire* came in February 1994 entitled "You are Where You Jack In" (Patton, 1994). Between 1994 and 1996, when women's magazines were literally ignoring the topic, *Esquire* abounded with articles that described the technology and its usage in a straightforward manner, detailing the beginnings of cyberculture. But, by September 1995, *Esquire* was featuring discussions of cyber-porn (Walls, May 1995) and hosting articles that discussed rankings of women's online photographs (Walls, September 1995). More recent articles about the Internet in *Esquire* include cyber-betting (Kurson, 2003) and online investing (Fishman, 2000).

Web sites that focus on the interests of men are available online, but none garner the vast audience that iVillage has. Men's magazines *Esquire, FHM*, and *Maxim* have Web site components, but are generally used to support subscriptions to the print publication. However, AskMen.com, a Canadian site similar in focus to iVillage, has been gaining popularity with male audiences. Its Web site touts over 5 million readers per month with content focusing on health, sports, fashion & lifestyle, and relationships. This presents content in similar categories to women's sites, but with different emphases.

For example, an article on Internet Addiction in AskMen.com starts with "Does your wife, girlfriend, parent, or sibling ever tell you that you are spending too much time on the computer? That you are neglecting your responsibilities?" (Bartekian, 2004). Performing a search on Internet Addiction on iVillage yielded an article on monitoring children online and recognizing when your husband is addicted to online porn. While both sites focus the articles in regard to relationships, the article in AskMen.com is concerned with the individual's usage of technology. In contrast, the iVillage article focused on the relation of the technology in regard to others. This is one simple example of the subtle shift in discourse that can contribute to gender gaps in technology beyond access. Additional analysis of iVillage and AskMen is provided in Chapter 6.

Another way in which women learned about the Internet came with the advent of women's broadcast media. Both Lifetime and Oxygen positioned themselves as women's television channels. Both channels have Web sites that complement their program offering, and often urge women to visit their sites for more information on programming.

Other media, such as book publishing also help to define women's usage of technology. For example, a book published in 2000 entitled *300 Incredible Things for Women to Do on the Internet*, included chapters "Just My Style," "We Are Family," "Protect Yourself," "Get Physical," "Glorious Food," "Safe at Home," and "Shopping Block" (Spizman & Leebow, 2000). By differentiating women's usage of the Internet from men's and identifying sites in terms of the discourses of home, body, family, and consumer, a unique digital discourse for women is created.

Now that women are online and are using Internet technology in vast numbers, they have firsthand experience with the technology. Rather than relying on other media for their representations and attitudes about the Internet, women are now equally represented online and can choose any Web destination that they wish. Did the masculine beginnings of the Internet and stereotyping in women's media influence the ways in which women's Web sites are representing women's relationship with technology? Or, rather, are women's Web sites breaking the mold and describing women's relationship with the Internet in ways that are non-traditional and counter to feminine stereotypes? What are the motivations behind women's Web sites and how do these motivations play into the ways in which Internet technology is positioned? This study will map the history and background of online gendered spaces, identify the major sites targeted at women, and then discuss the pertinent frames around the Internet. Identification of sites that provide alternate discourses will provide a basis for discussion of spaces of resistance and opportunities for alternate meaning making around women's relationship with Internet technology.

Chapter 2 includes a discussion of theoretical constructs relevant to this research including the social construction of technology, diffusion of innovation, feminist media studies, and cyberfeminism. It also includes theory relevant to the methodologies invoked in this research including content analysis, framing and discursive, textual analysis.

Chapter 3 provides an overview of research questions and frameworks. It details the process by which sites were selected and analyzed.

Chapter 4 provides the backdrop for women's usage of the Web by analyzing the ways that the Web was represented in women's print magazines in the mid- to late-1990s. *Better Homes and Gardens, Ms. Magazine*, and *Working Woman* were compared for their coverage of Internet and Web-related technologies.

Chapter 5 provides a detailed overview of gendered spaces online, discussing different women's Web sites that are some of the most prominent destinations for women online. The reasons for their inclusion or elimination for this analysis are provided. In addition, the men's site, AskMen.com, is introduced as a comparison to the women's lifestyle site, iVillage.

Chapter 6 offers a comparison of iVillage, the most popular and widely visited women's site, and AskMen, a comparable Web destination for men. Both sites share similar broad demographics and attention to lifestyle issues.

Chapter 7 compares feminist sites and the different ways that the Internet has been used for feminist causes on the sites for the Feminist Majority Foundation, the National Organization for Women, and Women's E-news.

Chapter 8 moves to the specific area of women's technology sites, looking at Digital Divas, GirlGeeks, and Cybergrrl. These sites provide unique opportunities for women to explore their usage of technology outside the constraints of mainstream or feminist sites. *Wired Magazine* is discussed as a point of comparison for its role in fostering digital discourse. While considered a general-purpose, technology space, *Wired* has been criticized for its misogynist and macho representations of the Internet. While

women's technology spaces do not have high traffic or attention, they do provide alternative spaces for women to visualize their usage of Internet technology.

Chapter 9 concludes the analysis with a discussion of the results and recommendations for future research.

This research was performed throughout 2004. The Internet and Web are dynamically shifting media, and the results of this analysis apply specifically to the data collected during this time period. In most cases, content on the sites that were analyzed did not provide date information, thus making longitudinal analysis of trends difficult. This research provides a snapshot of Web content that was available at a point in time and can hold potential for future research to analyze the ways these discourses influence access to and usage of technology.

Chapter 2: Literature Review and Theory

Positioning this study in relation to the current body of literature included identifying the nature of digital discourse; the ways in which other technologies have been introduced to and adopted by women, particularly that of the telephone and television; the role of women's print media in establishing feminine and feminist discourses; and the ways in which women have been invited online or have been courted as consumers by Web sites. The theoretical models employed in this study include the interplay between media determinism and the social construction (or social shaping) of technology, diffusion of innovation theory, feminist media studies, and cyberfeminism. Additionally, framing theory and the use of content and discursive, textual analyses are discussed as methods for assessing media texts.

MEDIA DETERMINISM/SOCIAL CONSTRUCTION/DIFFUSION

A basic contention in media studies is the extent to which technologies influence culture or culture influences technologies. Media determinism is often characterized by McLuhan's adage that "the medium is the message[1]," indicating that it is the medium itself that conveys meaning and brings about cultural change, rather than the content or users (McLuhan, 1964). He believed that it is "medium that shapes and controls the scale and form of human association and action" (McLuhan, 1964, p. 9).

[1] The actual book title by McLuhan is *The Medium is the Massage*. McLuhan was often noted for his word play and use of puns, and this phrase was later transformed to what is commonly known as "the medium is the message" the ultimate in technological determinism or that what we say is not as important as how we chose to say it.

While McLuhan's work is often cited as the extreme example of media determinism, McLuhan himself later displayed a more balanced attitude stating "we shape our tools and they in turn shape us" (Griffin, 1991, p. 294). Based on the broader idea of technological determinism, in which technologies shape and change our society, media determinism specifically identifies media as an influencing technology.

The idea of the social construction of technology, often posited by Raymond Williams, argues that it is the processes and power relations of society that shape technology (Lister, et al., 2003, p. 72). This approach recognizes the social implications of production in shaping technology. Based on the work of Pinch and Bijker, the idea of "interpretive flexibility" of technology is defined as the way in which different relevant social groups can develop different understandings of a technology (Kline & Pinch, 2002, p. 113). Kline and Pinch built on the concept of relevant social groups, arguing that structural exclusion of certain groups, like those based on gender or ethnicity, may prevent them from being empirically measured in regard to their impact on technology. These groups, nevertheless, may have an effect on how technology is developed and used (MacKenzie & Wacjman, 2002, p. 22).

Wajcman further identified the role of gender politics in the social shaping of technology. "Technologies bear the imprint of the people and social context in which they developed" (Wajcman, 1996, p. 22). The relationship of women with technology including their exclusion from the culture of technology is based on existing power relations in society. Departing from media determinism, Wajcman stated, "the process of technological development is socially structured and culturally patterned by various

social interests that lie outside the immediate context of technological innovation" (Wajcman, 1996, p. 24). The broader areas of feminist media studies and cyberfeminism will be addressed later in this chapter to identify the gender representations within media and technology and the ways that women's relationships with technology are constructed through these messages.

Rather than choosing between media determinism and social construction of technology, it is the interplay between these two theories that has practical application. Bolter and Grusin introduced the concept of remediation, defining a medium as "that which remediates" (Bolter & Grusin, 2000, p. 65). Looking at every new twist on technology as the attempt of each succession to simulate reality, Bolter and Grusin offer a differing view that integrates features of both McLuhan's and Williams' arguments. "A medium in our culture can never operate in isolation, because it must enter into relationships of respect and rivalry with other media." Therefore, this theory is deterministic in that each new version of media is driven by limitations of previous media. It also gives a nod to social shaping in that it reflects that there is nothing new to be created, that, with every iteration, media is simply trying to more closely simulate social reality. Bolter and Grusin avoid the determinism/constructivist standpoints by treating social forces and technical forms as the same phenomenon, "to explore digital technologies themselves as hybrids of technical, material, social, and economic forces" (Bolter & Grusin, p. 77). The concept of remediation is key to this analysis in that it seeks to identify whether new media influence the discourses around technology, or if previous discourses are simply remediated.

Additionally, diffusion theory is invoked in this research in that it entails the ways in which a new technology becomes adopted within society. As mentioned in Chapter 1, diffusion as defined by Rogers is "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 2003, p. 5). Diffusion theory is particularly concerned with how new ideas are disseminated and adopted. Based on the initial research of French sociologist Gabriel Tarde in 1903, diffusion is characterized by an S-shaped curve, with the slope of the curve indicating the rate of adoption. This rate can be predicted by sources of influence and motivational factors. By understanding the elements of this process, one can begin to assess the factors that influence access to and usage of the technology.

Rogers identified five characteristics that affect the rate of adoption of an innovation:

1. Relative advantage – the degree to which an innovation is perceived as better than the idea it supersedes.
2. Compatibility – or the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters
3. Complexity – the degree to which an innovation is perceived as difficult to understand or use
4. Trialability – the degree to which an innovation may be experimented with on a limited basis
5. Observability – the degree to which the results of an innovation are visible to others (Rogers, 2003, pp. 15-16).

The characteristics of compatibility and complexity are of particular interest in this study as they relate to the ways Internet technology was presented to women by

images in the media. While gender is but one factor that can influence adoption of technology, several other factors can influence the rate of adoption, including race, income, education, age, and training (Rosen & Weil, 1995). In addition, Rogers conceptualized five main steps in the innovation-diffusion process: (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation (Rogers, 2003, p. 20). This study focuses on the first two steps in understanding how women gained knowledge about the Internet that led them to form particular attitudes about their usage of the technology.

FEMINIST MEDIA STUDIES

Feminist researchers have studied the presence and impact of representations in women's media. This study extended the current body of research by applying feminist media concepts used on traditional print or broadcast media to the new media realm of the Web, thus merging the communications field with cyberfeminism.

Recognizing the reduced presence of women and women's issues in media, Tuchman forged the construct of "symbolic annihilation" in 1978, theorizing that there is meaning in absence, which trivializes women's issues and silences women's voices (Tuchman, 1978). Tuchman found that women were rarely portrayed on television in roles outside of homemaker, mother, and sex object. Working women were usually condemned and other representations of women were trivialized.

When Tuchman looked at research on women's magazines, she found that representations of women centered on middle-class married women whose existence was

defined by the men in their lives. "The women's magazines continue to assume that every woman will marry, bear children, and make a home" (Tuchman, 1978, p. 24).

While Tuchman's research was carried out in the late 1970s, more recent research on women's media found similar representations of women in terms of hearth and home. In looking at research of women's images over time, Kitch found four categories of scholarship: 1) the stereotypes approach (similar to Tuchman's research; 2) the search for alternative representations; 3) examining representations in regard to political or cultural ideology; and 4) analyzing media images as portraying multiple meanings (based on semiotic analysis) (Kitch, 1997). The research shows a shifting attention from a direct correlation of media images and reality toward a perspective that allows for the interpretation of alternate and multiple meanings. Kitch recognized that these theoretical perspectives should not be viewed as discrete and should be integrated in future critical work.

MacDonald found that women's discourses and the stereotypes identified in media were relevant to the dichotomy of public and private spheres.

> As men moved out of the home to work, the (male) bourgeoisie acquired increasing power in the course of the nineteenth century, the public world became identified with influence and power, the private with moral value and support. In bourgeoisie discourse, the split developed gendered attitudes, with men thought "naturally" to occupy the public arena, women the domestic and private (MacDonald, 1998, p. 48).

She identified that women's role as the primary consumer of household goods drove the advertising themes in the 20th century, with discourses evolving around being the capable household manager, guilty mother, and the flapper woman, or "unmarried

modern miss." As the century wore on and feminist stances of the 1970s were challenged, discourses continued to encourage women to be independent, yet feminine (MacDonald, 1998, pp. 76-90). The competing discourses that resulted from this period included the role of nurturer, woman as sex object, and the ways in which women's body image is created by media.

McCracken studied the history and production of women's magazines and found underlying and conflicting messages. In addition to their overt advertising, McCracken found covert ads in content and via cover designs, as well as visual interplay between advertising and content (McCracken, 1993). Ferguson, in an analysis of British women's magazines from 1950s-1980s, used content analysis to identify changing themes and values over time. She also analyzed the editors and organizational structure of each publication with a focus on economic imperative of the industry (Ferguson, 1983).

By analyzing the ways other technologies, like telephone and television, were introduced to women, effective parallels might be identified. When it was originally introduced, the telephone was positioned as a tool of serious business and later adopted in the home to facilitate housework. Over time, women appropriated and exploited this initially masculine technology for their own social and personal ends (Fischer, 1988, p. 211). Soon, however, derogatory stereotypes of women's usage of the telephone as frivolous and silly began to define a gender divide. "This gendering of the telephone may have simultaneously reinforced gender differences and also amplified women's abilities to attain both their normatively prescribed and personally preferred ends" (Fischer, 1988, p. 212). Women's affinity for the telephone helped them satisfy their need for

sociability, a need resulting from their isolation in the family home, to facilitate their role as social manager, and because it was a task that they simply enjoyed more and were more skilled at than men (Fischer, 1988, p. 226). Other technologies, like bicycles and automobiles, were of equal interest to women not only for their liberating effects, but also due to their socializing opportunities.

In 1992, Spigel published an analysis of the role of television in culture by studying the way it was represented in women's magazines and advertising. She found that television was introduced in the home via domestic discourses of the family and women's work, thus making its way into the center of family life. Spigel found that television was introduced in the home not by positioning it in a new way, but by following certain discursive rules found in media forms already popular with women. "Advertisers often adjusted their sales messages to fit the concerns voiced in women's magazines, and they also used conventions of language and representation that were typical of magazines as a whole" (Spigel, 1992, p. 7).

But Spigel found multiple and sometimes conflicting discourses. "By looking at the popular magazines as discursive sites, we can better account for the diverse number and kinds of meaning attached to television during its period of installation" (Spigel, 1992, p. 8). Much like the Internet, television was seen as the ruination of culture as we know it, creating a society of isolation, and at the same time, it was lauded for its ability to communicate diverse ideas to a broad audience. For example, Spigel found that while television sought to woo women viewers to daytime programming, women's magazines produced content to advise women on how to reduce the disruptive effects on normal

household labor. Similarly, while Web sites seek to attract an audience, they provide content that advises women on the subject of Internet addiction and cybersex as dangers that can undermine the family unit.

Meehan studied the ways in which women were defined as consumers by the television industry. She found that "societal divisions of labor based on gender, plus prejudicial assumptions about gender, played a significant role in defining and differentiating the commodity audience" (Meehan, 2002, p. 216). The differentiation between "prime time," or programming for the highly valued male commodity audience under the guise of "the audience," and "daytime," which was defined for a women's niche audience, highlights the value and quality discrepancies of the categories. From as early as 1929, daytime programming catered to women doing housework, listening to talk shows, and watching soap operas, so named for the corporate sponsorships of and product placements within the programs (Meehan, 2002). As women gained in economic power, they came to be defined as a niche audience, with prime time programming adding female-friendly elements and with cable stations being developed to cater to this demographic. But, the primary audience was still considered white, upscale, and male.

Meehan suggested that patriarchy and capitalism exist in a conflicting relationship in media. Markets operate rationally by discriminating against women by placing a greater value on the male audience and by treating the female audience as a niche. From a market perspective, it is logical to focus on a group with the greatest spending power. But, this perspective fails to take into account an important aspect of patriarchal society. While males are defined as primary breadwinners, women are also defined as spenders.

In their domestic roles, women are expected to relieve men of the burden of maintaining a household by spending the money that men earned on items for the home. "Noneconomic assumptions under-gird beliefs about what sorts of people *ought* to be in *the* audience," and "those assumptions follow familiar patterns of discrimination on the grounds of gender, race, social status, sexual orientation, and age" (Meehan, 2002, p. 217). Thus, Meehan identified that the market for television advertising was imperfect in that "corporations structure markets as instruments of oppression and not as liberatory spaces." She continued, however, that restructuring markets to be more liberatory would undermine capitalism, which depends on these disparities for profit (Meehan, 2002, p. 220). With women's media existing within the confines of capitalism, its ability to create liberatory spaces is also in question.

Can the Internet provide an alternative space to counter these limitations? Noting that utopian claims around the Internet's promise are commonplace, Seiter warned that the discourses surrounding computer technology, much like television, could serve to enforce rather than overturn hierarchies of gender, race, and class. Using ethnography to look at the gendered use of computers in the home and the ways technology manifests in women's work, Seiter recommended that one function of feminist research should be to temper the enthusiasm for new technologies (Seiter, 2003, p. 693).

This is not to assert a negative connotation around the ways in which feminine stereotypes are used to introduce and market Internet technology to women. Since women dominate the roles within the private sector of homemaker and caregiver, positioning technology for its connectedness and familiarity within the setting of the

home might influence more women to explore its potential. How women negotiate within and through these spaces will determine whether these representations are confining or liberating. Gledhill analyzed the ways that negotiations of conflicting discourses offer pleasure to the audience and suggested a "more positive stance towards the spaces of negotiation in mainstream production" (Gledhill, 1988, p. 87). Nor is there to be considered and studied one dominant or suggested reading, but rather "the textual critic analyzes the conditions and possibilities of reading" (Gledhill, 1988, p. 74). This approach challenges theories of textual determination and draws on psychoanalysis in understanding the ways in which meaning can be made in a particular text. Gledhill suggested that it is Gramsci's concept of hegemony, or the shifting of "ideological, social, and political forces through which power is maintained and contested" that replaces the idea of dominant ideology (Gledhill, 1988, p. 67). Other researchers have studied women-specific genres such as soap operas (Ang, 1985) and romance novels (Radway, 1987) and found that pleasure lies in the negotiation of conflicting messages.

So, while many women's Web sites use traditional feminine stereotypes to position their content, and in so doing, also assign the same frames to issues of technology and the Internet, it is unwise to jump to the conclusion that this approach is purely negative in its effects. Nor is this interpretation suggesting that audiences are given complete agency in producing meaning from texts. What is more interesting and feasible is to identify the different discourses around women and technology that women must negotiate and then discuss possible ways in which meaning can be made.

CULTURAL FEMINISM AND POSTFEMINISM

To further ground this study, it is necessary to also locate it within feminist theory. According to van Zoonen, "gender and power… form the constituents of feminist thought" (van Zoonen, 1994, p. 4). Gender is analyzed as one mechanism for structuring our symbolic and social worlds. Power is relevant in regard to understanding subordination and oppression in society. Since the 1970s, however, different perspectives critiquing the relationship between gender and power have emerged. Liberal feminist theory seeks to improve women's condition by working for equality in work and educational situations. Gender differences are ignored, but integration of women as equal in society is stressed. Marxist and socialist feminism complicates liberal feminism in that it recognizes that social force must be changed in order to eliminate difference based on political economy. The ways in which the dominant patriarchy interacts with capitalism insures second-class status for women in the current cultural climate. Radical feminism suggests that women must separate from men to fully gain power (Tong, 1998, p. 130). Generally, radical feminists are considered to hold an essentialist view, maintaining that gender differences can be explained by nature or biology (Cirksena & Cuklanz, 1992, p.29).

How that separation can occur is a point of contention, either through emphasizing or de-emphasizing women's role in sexual reproduction, through creating women-only spaces, or by glorifying feminine values as superior. Cultural feminism, defined by Alcoff, is "the ideology of a female nature or female essence reappropriated by feminists themselves in an effort to revalidate undervalued feminine attributes"

(Alcoff, 1988, p. 260). A cultural feminist perspective was important to this analysis in that it allowed the study of separate women's spaces within a male-dominated culture "for the nurturance of women's own culture and voice" (Lueck and Chang, 2002, p. 59).

As mentioned above, MacDonald recognized that, while women's discourses have evolved over time, they were the result of the dichotomy of public/private sphere (MacDonald, 1998). This argument relies on Jürgen Habermas' view that a single public sphere is the site of discursive relations or the place where political participation occurs (Fraser, 1992, p. 110-111). This approach ignores the role of alternative or *subaltern counterpublics* that Fraser identified. She argued that in stratified societies, or societies that produce groups of unequal power in structural relations, "arrangements that accommodate contestation among a plurality of competing publics better promote the idea of participatory parity than does a single, comprehensive, overarching public" (Fraser, 1992, p. 122). Subaltern counterpublics are "parallel discursive arenas where members of subordinated social groups invent and circulate counterdiscourses to formulate oppositional interpretations of their identities, interests, and needs" (Fraser, 1992, p. 123). Historically, groups that have created these counterpublics have included women, workers, people of color, and homosexuals. Feminist media flows from the ability of feminist counterpublics to offer new ways to describe social reality and recast identities.

Lueck and Chang used the characteristics of women's media provided by the Women's Institute for Freedom of the Press in looking at "WomanNews," the women's section of the *Chicago Tribune*. These included:

- Women speaking in their own voices
- Media's role to women
- A non-attack approach
- An activist approach (Lueck and Chang, 2002, p. 59)

Allen and Allen offered a similar view in *Media Report to Women* stating three characteristics of feminist journalism: 1) no attack on people; 2) more factual information; and 3) people should speak for themselves (Allen and Allen, January 1, 1976). By using these guidelines, one can identify the presence or lack of feminist principles regardless of a publication's overt identification as such. For example, when a women's magazine, such as *Better Homes and Gardens*, offers articles in which women describe their own circumstances, this can be viewed as a feminist characteristic within a publication that is not traditionally considered feminist. Thus, the concern is not necessarily to identify a feminist/non-feminist dichotomy, but to identify feminist discourses wherever they might exist.

Cultural feminism's identification of a women's culture, however, does not recognize the multi-positionality of women in our culture. Contemporary feminism, or what is sometimes known as postfeminism, is based on poststructuralist and postmodern theories that question the origins of knowledge and difference and establish their position in relation to other philosophical and political theories (Brooks, 1997). Rather than proposing a theory that is *after feminism* or *counter to feminism*, postfeminism reflects the maturing of feminism to accept plurality and difference in its theories. Postfeminism

resulted from the critiques of 1970s era feminism, or second-wave feminism, as hegemonic and dominant (Brooks, 1997, p.4). While the first wave of feminism was primarily concerned with women's suffrage in the late 19th and early 20th centuries, second-wave feminism sought to improve women's rights across a range of categories, including reproductive rights, work and pay issues, and sexual harassment. What second-wave feminists failed to do was reflect the diversity of unique situations and experiences of women, including race and sexuality. The concept of postfeminism is introduced here to supplement the discussion of cyberfeminism and to understand how the multiple experiences of women can also influence their relationship with technology.

But postfeminism has been criticized for fragmenting the feminist movement and shifting emphasis from its emancipating origins. It is, however, regarded as a relevant theoretical perspective in regard to feminist theory. Postfeminism is also related to the idea of standpoint epistemology, in which "different people undergo different experiences and thus gain widely varying understandings of what constitutes reality or truth" (Cirksema & Cuklanz, 1992. p. 34). Feminist theorists have explored this concept in which objective truths are questioned and knowledge varies based on experiences and situations or what is known as "the inescapable contextuality of knowledge" (Cirksena, 1992, 34). The concept refers to "both the importance of perspectives and experience to conceptions of truth to the existence of differing concepts of knowledge for people of differing experiences" (Cirksena and Cuklanz, 1992, 40). By studying marginalized positions, critical analysis can be generated regarding sites of resistance that reflect differing voices (Harding, 1993). Applied to the current analysis, this is relevant in

identifying and understanding the role of alternate discourses of women and Internet technology that are being offered outside mainstream Web sites.

While feminist thought is an active scholarly realm, the feminist cause is not often embraced in the practical sense. Many young women are hesitant to consider themselves feminists, but have actively integrated feminist values into their own lives. Some consider this to be an indication of feminism's progress toward social change (Findlen, 1995, p. xv). Others feel that the label is rejected due to stereotypes and distortions about feminists. "Feminists are still often assumed to be strident, man-hating, unattractive – lesbian" (Findlen, 1995, p. xv). In either case, attention is diverted from important issues around sexism, gender equity, and discrimination. Discourses in feminist media can provide viable and challenging alternatives to traditional women's media, but a progressively smaller audience is receiving these discourses over time.

CYBERFEMINISM

The concept of cyberfeminism is a general area in which theories of feminism are applied to women's usage of technology. Cyberfeminism borrows qualities from other feminist theories, like socialist feminism's focus on the social and economic exercise of power in society, and postfeminism's representation of marginalized groups, and applies those theories to digital discourse. In 1989, Jansen published an article discussing the exclusion of gender politics in regard to the information society (Jansen, 1989). In 1992, van Zoonen studied the relationship of feminist theory and information technology (van Zoonen, 1992). "Common sense has led many of us to believe that women and men relate differently to technology" (van Zoonen, 1992, p. 9). She cited that several publications

have identified the absence of women from the invention, creation, and design of new technologies, but that their role as consumers of certain technologies is equally well documented. She noted a three-prong approach in studying gender, technology, and culture in understanding the relationship of women and technology.

Plant's definition of cyberfeminism is "an insurrection on the part of the goods and materials of the patriarchal world, a dispersed, distributed emergence composed of links between women, women and computers, and communication links and connectionist links" (Plant, 1997, p. 182). Tracing the origins of women and computing, Plant recognized that women were much like machines, robots dependent on the support of men. "Women have been trapped by economic dependence on men as surely as robots are controlled by the implicit threat that their masters can always cut the power supply, turn the on-switch off, leave or put them back on the shelf" (Plant, p. 105) She explored the nature of women's work in technology by using examples of women's culture around weaving and women's use of office equipment and telephones. Women took to the workplace, became proficient at using machines, increased their literacy levels, and even developed their own language in shorthand. These skills all set up women's eventual ability to take one's place in the Internet culture. Plant cited the decentralized nature of the Internet and the logical connections that can be made as perfectly suited to women's skills, thus eliminating the role of the organizer, initially played by men in society.

In contrast to Plant, Spender's research identified that women were behind in their usage of Internet technology, and in order to reap the power and financial benefits, needed to remedy the situation. "When it comes to cyberspace, men have the power. But

it doesn't have to stay this way. And it won't. Not if women are convinced of the necessity – and the desirability – of becoming involved" (Spender, 1995, p. xxi). Other researchers have explored the reasons behind women's reluctance to enter the field of computing, citing social and cultural attitudes formed in childhood and education (Cooper & Weaver, 2003; Margolis & Fischer, 2002; Furger, 1998).

However, Spender was intrigued by Plant's interpretation of the current state of technology for its ability to depart from the old system of males and females (Spender, 1995, p. 246). Other feminist researchers have explored the ways in which gender and identity are created in an online (Haraway, 1991; Turkle, 1995; Wajcman, 1996). Wajcman saw technology as having three distinct paths available. Computing could have been gender neutral or it could have been a female domain, based on Plant's description of technology with stereotypically feminine qualities. But evidence shows that computing has been socially constructed as a male domain (Wajcman, 1991, p. 150-159). By defining technology in regard to men, girls and women may approach technology less often and with less confidence, may relate to the machines differently, and may use them for different purposes. "But we should be extremely wary of saying that because women have different ways of proceeding, this indicates a fundamental difference in capacity. Rather, such discrepancies in cognitive style as can be observed are the consequences of major sexual inequalities in power" (Wajcman, 1991, p. 158).

Millar's definition of cyberfeminism was more general than the liberalist approach of Plant. She regarded cyberfeminism as "a women-centered perspective that advocates women's use of new information and communications technologies for

empowerment" (Millar, 1998, p. 200). And Hawthorne and Klein further elaborated on the concept of cyberfeminism by assigning it the characteristics of *connectivity* – the means for communicating and sharing information, *critique* – the ability to discern above the hype and seductiveness of the technology, and *creativity* – the ways in which technology might be uniquely used for social change (Hawthorne & Klein, 1999, p. 14). "Cyberfeminism is a philosophy which acknowledges, firstly, that there are differences in power between women and men specifically in the digital discourse; and secondly, that cyberfeminists want to change that situation" (Hawthorne & Klein, p. 2).

Shade used a feminist social shaping perspective as well as a political economy approach to understanding Internet communities created by and for women. While primarily concerned with spaces of women as agents, she also analyzed the emergence and promotion of commercial Internet sites for women fueled by corporate interests and the tension between the two (Shade, 2002, p.5). She identified the discrepancy between feminist uses of the Internet and the trend to feminize the net in ways that encourage women's consumption rather than production or analysis. Shade used theory provided by Rakow to justify her analysis. "To understand the relationship between gender and communication technologies, Rakow advises us not to look for differences in the behavior of men and women towards a technology, but instead to 'look for the ways in which the technology is used to construct us as women and men through the social practices that put it to use'" (Shade, 2002, p. 15).

The particular area of interest in this study concerns the surrounding digital discourse or the culture and ideology of technology. Consalvo looked at the ways

women and technology were represented in media from 1990-1998. She found that during that time, "the Internet was sometimes depicted as a place hostile to women, where few women were welcomed and indeed few women spent their time" (Consalvo, 2002, p. 113). She analyzed the various metaphors employed by the computer culture including "frontier" and "superhighway," and the ways these metaphors interact with gender. Later metaphors served to identify women as consumers of technology and to encourage their usage in regard to consumption. She concluded, "while women are taking their place as equal partners in the use of cyberspace, their role in its production or maintenance is still quite small" (Consalvo, 2002, p. 133).

Further analyzing the role that intertexts played in women's relationship with computers, Warnick performed a rhetorical analysis on print media and Web site discourses urging women to go online, during the period 1995-1997. Warnick considered "how ideology is embedded in this invitational discourse, how the presence and promise of new technologies can affect how women think about themselves and their relation to them, and how elitist discourse excludes and marginalizes women even while it attempts to invite them online" (Warnick, 1999, p. 2). She concluded that although invitational discourse may not have encouraged women's broad participation, the Internet is providing outlets for expression, humor, and creativity in an environment that is more accepting toward women. She recommended that women redefine the Internet's potential usage regardless of the ways in which they were lured online.

Exploring the gendered discourse in *Wired* magazine, arguably the most influential medium around techno-culture, Millar explored "how digital technological

change is being packaged and sold to the public through cultural messages that support a particular view of how the future should be organized" (Millar, 1998, p. 25). *Wired* published its first issue in January 1993, and has since experienced great commercial and critical success, garnering the National Magazine Award within its first three years, and spawning successful Web site and book complements. Millar found that many women did not read *Wired*, and if they did, they did not enjoy the experience or find its content meaningful. To find out why, she applied feminist theory to the cultural symbols and conditions of digital culture as exemplified in *Wired* and identified what was being left out and who had the power. She found that *Wired* used specific discourses around the future, innovation, and the hypermacho man that served to eliminate difference and excluded those it considered Other - women, minorities, poor, technologically challenged. "The construction of women and minorities that are found form a separate discursive stream in *Wired* and are relegated to subordinate status" (Millar, 1998, pp. 96-97).

By using stereotypical images of women as sex objects, in non-threatening careers, or as mother, housewife, or schoolgirl, *Wired* perpetuated traditional gender stereotypes, while at the same time projecting a future in which technology facilitates a society where gender is transparent. Any challenge of this is considered backward and anti-progressive. Even though *Wired* has women in its employ, in top management (one of its founders is female) and as columnists (albeit less than 15% of its writers), discourse is designed to appeal to its target market, those who identify with images that link computer technology and hypermacho masculinity and tropes such as becoming a pioneer

in the digital frontier (Millar, 1998, p. 77). In fact, much of the writing by female columnists focused on sex, dating, or the exceptional accomplishments of other women (Borsook, 1996, p. 30). As a *Wired* writer, Paulina Borsook revealed in a personal account of her time at *Wired* that attempts to integrate gender analysis of technology were consistently met with resistance (Borsook, 1996, pp. 33-40). Much like a women's magazine, in which specific codes help to define desirable gendered behavior, *Wired* creates a specific identity designed to create loyalty to the magazine and its ideas.

Millar found six myths used in encoding digital ideology that included the myths that worshipping technology in such a way that all human responsibility is eliminated, defining cyberspace as distinct and not impacting the physical world, describing rapid change as the only way of the future, the irony of spreading the ideology of free information in a legal and economic climate that relies on government intervention for its existence and propagation, touting the global village in light of digital imperialism, and the ways in which *Wired* perpetuates consumerism for the high-end consumer in the privileged virtual class (Millar, 1998, pp. 134-156). Millar advocated gender discourse analysis as a way for feminists to anticipate social and technological change, or what she conceived as a "feminist politics of anticipation" (Millar, 1998, p. 67).

It can be argued that the Internet itself comprises a separate space. Distinctions between online and offline worlds are often made. But, like other media, primary users or, in essence, the audience, has been traditionally defined as upscale, white, men. As the user base of the Internet becomes more diverse, based on the history of other media within a capitalist system, it is less likely that the audience and resulting content will

become more inclusive. There is already evidence that it is becoming more segregated and fragmented into niches. Women are encountering similar prejudices online as in their offline existence, and the distinction between the two is growing less obvious.

METHODOLOGY

This analysis invokes a multiple-method approach in order to understand the general frames and discourses that are being presented in online gendered spaces. An understanding of the theory behind these approaches is necessary before describing the particular methods and research questions involved in this study.

Framing and Content Analysis

Framing as defined by Entman is selecting "some aspects of a perceived reality" to enhance their salience in such a way as to "promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation" (Entman, 1993). Frames can be used as a strategy by humans to help with processing vast amounts of information, a process of selection and prioritization, or as Goffman relates, frames help audiences "locate, perceive, identify, and label" the flow of information around them (Goffman, 1974). In regard to media, Reese offered the following definition for frames: "Frames are organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world" (Reese, et al., 2001, pp. 11). "What we call things, the themes and discourses we employ, and how we frame and allude to experience is crucial for what we take for granted and what we assume to be true" (Altheide, 1996, p. 69). When used by media workers in setting the context of a

story, framing can serve to promote certain values and discourage others. "Framing analysis is a constructivist approach to examine news discourse… [with a] focus on conceptualizing news texts… [as] syntactical, script, thematic, rhetorical structures… so that evidence of the news media's framing of issues in news texts may be gathered" (Pan and Kosicki, 1993, p. 50). According to Tankard, framing differs from bias, however, in that it is more sophisticated and complex, reflects the richness of media discourse and subtleties of nuances of debates, and can have a subtle, yet powerful, influence on audiences (Tankard, 2001, pp. 96-97). Another approach recommends a focus on the rise and fall in importance of frames over time rather than centering on the power of particular messages (Reese, et al., 2001, p. 373).

Content analysis has been applied in a variety of areas of communication research including framing. Use of content analysis in communications research has a long history. In 1952, Berelson offered this definition: "(C)ontent analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (Berelson, 1952, p. 18). The focus on manifest content indicates that the definition is most concerned with actual meaning rather than what is implied or connoted. Holsti, in 1969, defined content analysis as "any technique for making inferences by objectively and systematically identifying specified characteristics of the messages" (Holsti, 1969, p. 14). The emphasis here is on the systematic nature of the process. Krippendorff (1980, p. 21) further highlighted this characteristic with "(c)ontent analysis is a research technique for making replicative and valid inferences from data to their context." This view placed the emphasis further on the text as "data"

and the importance of validity and reliability in the research. Finally, in 1998, Riffe, Lacy, and Fico elaborated on the process of content analysis by describing it as "the systematic assignment of communication content to categories according to rules, and the analysis of the relationships involving those categories using statistical methods" (Riffe, Lacy, Fico, 1998, p.2). Content analysis can be both quantitative, in which occurrences of words, terms, or phrases are counted and analyzed, or qualitative, in which trends and themes within texts are discussed.

Examples of content analyses focused on framing of women's issues include the framing of feminism in news programs (Lind & Salo, 2002) and how news and women's magazines framed breast cancer (Andsager & Powers, 1999). While quantitative content analysis is often used to detect the presence of frames, qualitative analysis using discursive textual analysis or ethnographic content analysis (Altheide, 1996) can reveal frames through thick description, systematic trend analysis, and engagement with the texts. Combined with audience research, framing can be an element of an agenda setting analysis that predicts whether elements in the media's agenda effect the salience of those events in the minds of the public (McCombs & Shaw, 1972).

Qualitative, Discursive and Textual Analysis

The main qualitative method employed in this study is that of textual analysis based on the discursive theories of Michel Foucault. Foucault used the term "discourse" to refer to the relationship between language and social institutions. Based on poststructuralist principles, Foucault devised a theory of language and social power that analyzed the institutional effects of discourse and its role in creating and governing the

individual. "Discourses, in Foucault's work, are ways of constituting knowledge, together with social practices, forms of subjectivity and power relations which inhere in such knowledge and the relations between them" (Weedon, 1996, p. 108). More simply, discourses are "the kinds of framing, inclusion, or exclusion of certain points of view" (Altheide, p. 69). The most powerful discourses are based in institutions, such as the law, medicine, education, or the organization of the family or work. But discourses are not isolated ideas devised by single individuals. Rather they are developed by groups that have the authority to advance these ideas into our culture. According to Phillips & Hardy, "social reality is produced and made real through discourses, and social interactions cannot be fully understood without reference to the discourses that give them meaning" (Phillips & Hardy, 2002, p. 3). Some discourses are more powerful, and less easily challenged than others and are referred to as dominant discourses or ideologies (McKee, p. 100). The power of the dominant ideology is that it may be considered "common sense" by the culture, and by simply challenging the discourse, one can be considered outside the acceptable standards of the culture. But while discourses produce power, they can also undermine and expose weaknesses. "The degree to which marginal discourses can increase their social power is governed by the wider context of social interests and power within which challenges to the dominant are made" (Weedon, 1996, p. 111). "It is only by looking at a discourse in operation, in a specific historical context, that it is possible to see whose interests it serves at a particular moment" (Weedon, 1996, p. 111). In regard to gender and language, MacDonald related discourse to media practice as "referring less to the grammar and structure of the language; more to the

relative entitlement of men and women to speak up and be heard, to define the world we live in" (MacDonald, 2003, p. 44).

Focusing on discourse as a process of making meaning, MacDonald defined it as "a system of communicative practices that are integrally related to wider social and cultural practices, and that help to construct specific frameworks of thinking" (MacDonald, 2003, p. 1). This idea of "frameworks of thinking" related discourse to framing theory mentioned above, but recognizes the shifting nature of frames and the ways in which they can be contested and debated. MacDonald's approach to discourse included verbal as well as visual signification and linked it ultimately to action. "Words and images, by defining and labeling phenomena, frame the terms in which we think about these and may, in turn, influence policy-making" (MacDonald, 2003, p. 9).

MacDonald argued that the media may not portray reality, but actually help construct versions of reality. This idea of construction goes beyond representation to reflect the role of media in interpreting and shaping our ways of knowing. In conducting discourse analysis, she stated "the search is less for a singular 'truth' than for the distilled wisdom achievable through an examination of multiple and contrasting discourses," and she referenced Foucault by stating that the goal of discourse analysis is not to uncover the truth, but to understand how "effects of truth" are produced (MacDonald, 2003, p. 18). Additionally, MacDonald was in favor of Foucault's elimination of binary assumptions regarding dominant and alternative media, as this distinction over simplified the ways in which power and influence are exercised (MacDonald, 2003, p. 37).

In a slightly different approach, Fairclough recommended studying representations, as well as identities and relations in the texts. "A useful working assumption is that any part of any text (from the media or elsewhere) will be simultaneously representing, setting up identities, and setting up relations (Fairclough, 1995, p. 5). Fairclough articulated an attention to discursive and socio-cultural practices in addition to texts and the systematic links between them. "The wider social impact of media is not just to do with how they selectively represent the world, though that is a vitally important issue, it is also to do with what sorts of social identities, what versions of 'self', they project and what cultural values (be it consumerism, individualism, or a cult of personality) these entail" (Fairclough, 1995, p. 17). Fairlough took the view that texts are sets of options, selected from the potential options available. These choices include language and grammatical structure, meaning, voices, identities, as well as production genres (Fairclough, 1995, p. 18). In addition, Fairclough related 'framing' to discourse. "Analysis of 'framing' draws attention to how surrounding features of the reporting discourse can influence the way in which represented discourse is interpreted" (Fairclough, 1995, p. 83). Subtle choices in language, such as the selection of certain verbs, can change the interpretation and tone of events.

Phillips and Hardy differentiated discourse analysis in terms of method and methodology. "Discourse analysis does not simply comprise a set of techniques for conducting structured, qualitative investigations of texts; it also involves a set of assumptions concerning the constructive effects of language" (Phillips & Hardy, 2002, p. 5). They stated that discourse analysis looks at how ideas were socially produced and

maintained over time, and that the analysis should pay attention to text, discourse, and context. Their model placed individual analyses on a grid of two continuums: text versus context and critical versus constructivist approaches (Phillips & Hardy, 2002, p. 20). They also recommended the study of "naturally-occurring texts," or texts as they appear in everyday life, as a better source of data for discourse analysis portraying language in use (Phillips & Hardy, 2002, p. 71).

By studying discourses as they relate to other social institutions, one can trace the influence of such phenomena on the encoding of messages by communication institutions (Hall, 1980). This study analyzed the discourses of Internet technology on online gendered spaces, thus making relevant the production environment of Web sites, discursive models used previously by women's media, and the ways in which women are socialized to deal with technology in our culture. Discourse analysis is combined with an ideological/historical assessment of the nature, origins, evolutions, and ownership of such sites, as well as attention to potential narrative strategies used to discuss or describe the Internet.

Discourses are studied through a textual analysis of content on online gendered spaces. A text is something in the culture in which meaning is made; with the proliferation of the Web and its cultural influence, content on Web sites qualifies as text worthy of study. Textual analysis allows the researcher to "make an educated guess at some of the most likely interpretations that might be made of the text" (McKee, 2003, p. 1). This interpretation helps to understand the possible ways in which sense is made of these discourses and knowledge is passed within the culture. From a poststructuralist

perspective, the researcher can look at differences between texts without claiming that one of them is correct. Discursive textual analysis seeks to identify interpretations without passing judgment on the truth or reality of a particular text.

Textual analysis works by relying on clues that are left in the material traces of the practice of sense making: the texts. According to John Hartley, textual analysis is like forensic science (McKee, 2003, p. 15). Forensic science does not produce a witness to a crime, but it can provide evidence as to what occurred. Although we can never be certain as to how people interpreted a particular text, we can look at the clues in the text and gather evidence about similar ways in which meaning is created to develop assumptions.

McKee recommended four categories in achieving a thorough textual analysis (McKee, 2003, p. 93). First, one must research other texts in the series. For example, a single article or group of articles on a topic on a single Web site is not enough evidence of its presence in the culture. It is important to study additional articles and the context of the sites in which the articles are produced. Second, the genre of the text must be analyzed. In the case of this study, the genre of online gendered spaces must be understood in opposition to other types of Web sites and media in order to understand the ways it could be used in the culture. Third, intertexts, or "publicly circulated texts that are explicitly linked to the text under study" (McKee, 2003, p. 97), must be comprehended. This includes discussion in other media about the text, like *New York Times* articles about iVillage, articles in the print version of *Cosmopolitan* about the Web, or books or television shows dealing with women and computers. The final category is

the broadest, considering the wider public context in which the text is circulated, including the use of language and other discourses available in the culture. This study seeks to achieve analysis within all of the above mentioned categories by identifying relevant Web content across a variety of online gendered spaces, by performing an analysis of the history and background of the Web and women's role in that history, by researching discussions of women and the Web in news media and women's publications, and by studying the relevance of the topic in relation to the discourses of femininity, cyberfeminism, and postfeminism.

In addition to these theories, other concepts will be explored. For example, the profit-orientation of many mainstream Web sites has a strong influence on the type of content. An analysis of traffic and audience is necessary to understand the motivations of the site developers and owners. The production environment of the sites, the ownership, and the presence of women in management capacities is also analyzed to fully expand our understanding of the environment of sites targeted toward women or men. And historical analyses (as far back as the early 1990s) is critical in identifying strategies used in other media to either encourage or discourage women's use of technology.

This multi-method approach is an improvement over any one theoretical model in that it should more broadly explain the complex interaction of gender and technology. A simple framing study of the major discourses found on online gendered spaces would be interesting, but could not provide deep insight without a discussion of these broader implications.

Challenges to Studying Web Content

A study with clearly defined research questions, that is specific as to its elements and the theories invoked, is presented here to minimize challenges associated with this multi-theoretical approach. But studying Web content also provides unique challenges. Mitra and Cohen defined five characteristics of Web content that make it different from print. Intertextuality refers to the way that texts are linked through the process of hyperlinking. The ability to hyperlink leads to the second characteristic of nonlinearity that refers to the ways in which readers can navigate through content. On the Web, it is possible to depart from the linear nature of print and provide various paths through stories that users can choose themselves. In addition to choosing their own paths, users can often contribute their own content to the Web leading to the third characteristic of "reader as writer." The Web also has the ability to provide multimedia content beyond text, in the form of images, video, audio, and animations, and can be reached by a global audience (Mitra and Cohen, 1999). These characteristics provide challenges both from the perspective of selecting, tracking, and organizing of content, as well as the context in which the typical user might be engaging with it.

McMillan analyzed the steps taken by researchers of online content and found that the "requirement for rigor in drawing a sample may be one of the most difficult aspects of content analysis on the Web" (McMillan, 2000, p. 81). She found difficulty in selecting a random sample due to the dynamic nature of Web content. Additionally, she found that selecting a proper unit of analysis was varied, with some researchers using the home page of a site and others attempting to do more comprehensive analyses of entire sites.

The challenges in studying Web content have resulted in few content analyses of Web sites. In 1995, Aikat analyzed government, academic, and commercial Web sites to determine their information content. Ha and James analyzed business Web sites for interactive features (1998). A few studies focused on personal home pages (Bates & Lu., 1997; Dominick, 1999). Even fewer content analyses have been performed addressing women's issues online. In 2002, Gossett and Byrne content analyzed violent pornographic sites and their portrayal of women victims and male perpetrators. Other qualitative studies included a textual analyses of pornographic Web sites (Heider and Harp, 2002), a comparison of the *Glamour* Web site to its print companion (Consalvo, 1997), an ethnographic content analysis of teen girls home pages (Stern, 2002), and a rhetorical analyses of political activity on feminist mother or alternative parenting sites (Koerber, 2001).

Relying on lessons from traditional content analysis, Rossler also addressed challenges in studying online content in sampling, standardizing and recording data (Rossler, 2002, p. 292). He provided four categories of content to aid in sample selection:

- Content addressed at a broad audience
- Content which is aimed at a limited audience
- Content which is not intended to be perceived by the general public, but only insiders, often a conspirative group
- Content that must be paid for (Rossler, p. 299)

These categories aid in sample selection by reducing the number of sites under analysis and focusing the population for the intended purpose of the study. Sites across categories may not be easily compared. But Rossler found that online communication must be conceptualized from a "dynamic-transactional perspective where different types of communication can be included simultaneously" as opposed to traditional content analysis which analyzes static, prepared messages (Rossler, p. 303).

Rossler and McMillan both addressed issues of reliability and validity in regard to online, quantitative content analysis. McMillan suggested that the same rigor in coding printed text be used for online coding, recommending multiple coders, coder training, and intercoder reliability checks (McMillan, 1998, p. 88). Rossler recommended saving the content under study in data files and archives, including the archiving of texts that are coded "live" and online. Rossler stated that although a certain level of replicability should be maintained, in many cases, when content is unique to a point in time or developed uniquely through user interaction, the goal of reliability becomes more difficult to achieve (Rossler, 2002, p. 302). Coders must have the necessary technical abilities and an understanding of the nature of cyberspace and hypertext, in addition to understanding the nature of the material under study (Rossler, 2002, p. 303).

Rossler added that validity is challenged in online content analysis due to the many variations of the environment in which it is received including monitor size and resolution, typefaces, color settings, and browser characteristics (Rossler, 2002, p. 303). In addition, as users increasingly also receive Web content from a variety of devices, like cell phones and digital assistants, validity in studying it will continue to be challenged.

Finally, Stempel and Stewart found difficulty in comparing online content to that of other media, citing differences in availability of audience data and the structure and availability of content presented between media (Stempel and Stewart, 2000). They recommended the need for more researchers better equipped with funding to enable them to meet the challenges of the new medium (Stempel and Stewart, 2000, p. 546).

This particular study minimizes the challenges associated with studying Web content by focusing on sites of a particular genre and style that are targeted to a mainstream audience. Comparisons will be made between Web sites as opposed to other media, although a descriptive analysis of women and technology in popular press and women's magazines will be addressed. In addition, the selection of content will be focused by using standardized search terms and using either the search engines provided by the sites or the Google feature for searching Web domains. The primary was conducted on content that has been developed by commercial sites for their users, as opposed to content from discussion boards or chats on the sites, although these features will be described in setting the context of each site. The next chapter details specific research questions and the research framework that was employed in this analysis.

Chapter 3: Research Questions and Framework

The methodology used in this project follows the multi-methodological model described in the literature review, using both quantitative content and framing analysis and qualitative, discursive, textual analysis. The project was executed in phases in a deductive approach from a general description of gendered spaces to the more specific locations of women's content. The primary analysis was of the content of individual sites.

The research questions explored by this study are as follows.

1. What is meant by an online gendered space? What general frames or discourses are used to signify that a site is targeted at women or men? This area is analyzed by a qualitative, contextual analysis of the setting of gendered spaces. Web searches using directories such as Yahoo and Google for the category of Women were used to understand how online sources categorize sites for women's usage. Additionally, a preliminary analysis of print media and their discussion of Internet-related topics provided a foundation for the frames and discourses used by online gendered spaces.
2. What categories exist for gendered spaces?
3. What are the major sites in each of these categories? Which sites are experiencing the most traffic or attention? Strategies used included detailed Web searches and analysis of Web traffic.

4. How are the major women's sites framing women's relationship with the Internet? How do these discourses differ from sites targeted at men? What are the discourses used by these sites to construct this relationship and how do they compare with our current understanding of digital discourse? Where do alternative discourses exist? This is the major research area of the study.

The study employed several preliminary phases in understanding and identifying the environment of gendered spaces, and then moved into deeper analysis and discussion.

PHASE I: PRELIMINARY ANALYSIS OF GENDERED SPACES

This study began by analyzing the context and setting of gendered spaces. What are the different ways in which sites are developed and presented to women and men? This included a qualitative discussion and review of popular press, women's magazine, and academic journal coverage of the Internet during the period of 1994-2003. Additionally, this phase included using both Yahoo and Google directory searches to identify the ways that gendered spaces were categorized by online search engines. Web usage statistics were also considered to identify spaces that exhibited high traffic.

PHASE II: SITE SELECTION

The next phase involved choosing several sites that were identified in Phase I for further analysis. A total of nine sites were chosen that were considered gendered spaces. The sites were identified as gendered either specifically in their title or indirectly by analyzing their mission and content. Each site developed and presented content that

would provide information about the Internet and that was identified as significantly high in traffic or easily accessible by using Internet lists of traffic and search engine directories of Women's sites. iVillage was the first site selected for study as it met the mentioned criteria. It is arguably the most visited site targeted for women. Most recently iVillage changed its slogan and tag line to "The Internet for Women." iVillage's current approach and positioning led to questions regarding exactly how the Internet for women differs from the ways men use it. This site is clearly a women's lifestyle site, using a women's magazine model to present content. In comparison to iVillage, a site with a similar focus on men, AskMen.com, was selected.

To further compare differences with iVillage, feminist sites were analyzed to identify the ways in which these sites discussed the usage of Internet technology. The Feminist Majority site (feminist.org), the site of the National Organization for Women (now.org), and Womensenews.com were selected. These three sites provided a broad slice of feminist perspectives and motives ranging from general information to activism and chapter formation.

A third category was that of women's technology sites. The Web offered many sites that focused on women and technology, from personal sites to sites representing women's technology organizations. Girlgeeks.org, Digitaldivas.com, and Cybergrrl.com were selected in this category. This category provided another area of alternate discourse around using technology for the empowering purposes of creative expression and communication.

PHASE III: SITE HISTORY AND BACKGROUND

Each site was analyzed in an ideological and historical overview that detailed origins, evolution, and focus. This involved a general discussion of the audience, the type of content prevalent on the site, the management or ownership structure, and the ways in which design and layout influenced content. Additionally, "The Way Back Machine" (archive.org), was used to provide historical reference for design and certain content changes, like navigation, section titles, and mission.

PHASE IV: DISCOURSE AND QUANTITATIVE ANALYSIS

A combination of discourse analysis and quantitative content analysis identified the major frames used to construct women's relationship with the Internet. In analyzing media texts for gender issues, van Zoonen recommended such a strategy (Van Zoonen, 1994, p. 75). Combining a content analysis for inventory purposes with a qualitative and textual analysis of discourses provided depth and illustration beyond that of purely quantitative results. The quantitative content analysis involved the identification of articles for each site by using the site's search capabilities, searching for topics regarding the Internet. The search string "Internet OR Web OR online" was applied either to the site's search feature or by using the domain search feature in Google. Text of articles was saved in individual files upon which the quantitative analysis was performed. The article search for iVillage and AskMen was performed in January 2004, while all other sites were searched in June 2004.

Since articles were inconsistently dated across sites, it was not possible to provide detailed longitudinal analysis. The qualitative analysis will identify some issues that

arose over time by analyzing changes in home pages with The Wayback Machine at archive.org. But since these articles currently exist and are available to anyone searching for Internet content, the changes over time are less material in regard to how women might be interacting with them.

The original coding was done by hand with the unit of analysis being the article. Initial categories were assigned to articles and then the process was redone to collapse or create new categories. The frames identified in this analysis in regard to Internet usage included Home, Business, Technology, Dating/Relationship, Lifestyle, Sport/Gambling, Privacy, Health, Sex/Pornography, Activism, and Political. In some cases, the categories were broken further to provide insight into the Activism and Political categories. This analysis is supported by charts comparing each site in the section by major frame.

The articles for each site were then submitted to VBPro, a computerized content analysis tool developed by Dr. Mark Miller at the University of Tennessee (http://mmmiller.com/vbpro/vbpro.html), to identify terms used disproportionately across sites and to code for overall term usage. A codebook of terms associated with eleven general frames is available in Appendix B. Qualitative comments made as notes regarding discourses during the manual coding also supplemented the quantitative analysis. This analysis is also supported by charts that identify the percentage of terms in each major frame used by the site in each category.

Discourse analysis included identification of discourses within each frame and the ways that these were used in each site. For example, within the Business frame, the iVillage site focused primarily on work at home strategies for small businesses, while

AskMen used the Internet for investments and stock advice. Differences in general topics of discussion were identified, like Abortion and its related discourses, which were prominent in the Feminist sites, but almost non-existent in other gendered spaces.

PHASE V: DISCUSSION AND IMPLICATIONS

The final phase explored the implications of this analysis, identified potential reasons for the results, and addressed implications and opportunities for future research.

What follows are chapters dealing with each section, general lifestyle, activism, and technology sites. The chapters provide additional information on the data, including the number of articles analyzed for each site, and statistics, including number of words and average words per article. The multi-theoretical method described above provided a unique look at the ways in which Internet technology has been gendered by both print media and online spaces. The two-pronged approach to the quantitative analysis (hand coding and computerized analysis) analyzed at overall themes as well as the usage of language. The reliability of the hand-coded analysis was assessed through comparison with the computer analysis to ensure consistency of results (See Table 3-1).

Correlations between Hand-coding and VBPro Methods	r
iVillage	0.96
AskMen	0.76
Feminist Majority	0.80
NOW	0.80
Enews	0.68
Cybergrrl	0.93
Digital Divas	0.77
Girlgeeks	0.95

Table 3-1: Correlations of reliability between methods. All correlations are significant at p<=.05.

The qualitative, discursive analysis provided deeper insight into the ways these themes became operational on the sites. While each component of the analysis provided unique perspective on the environment of gendered spaces, when these components are taken as a whole, a broader picture of the ways that gender manifests on the Web is more clearly understood.

This analysis is limited in approach by analyzing data resulting from search strategies. Searching for particular articles dealing with technology topics may not represent the way that most users encounter these articles on the site. A more detailed analysis would include engaging with each site over a period of time, and recognizing when and where on the site such articles appeared and how this positioning might impact meaning. However, seeking out Internet technology articles as a whole is an important preliminary step in identifying potential gendered discourses.

Chapter 4: A Tale of Two Tech Columns

Women's magazines began covering the topic of computer technology as early as the 1980s, when computers became commonplace in the workplace and started to make an appearance in the home. For example, in September 1983, *Ladies' Home Journal* published a special content feature entitled "How to Get Smart About Computing." This eight-page spread included an introduction by notable technology futurist Isaac Asimov, a review of high-tech jobs, an explanation of how computers worked, and a glossary of hardware and software terms. The final article was entitled "How I Learned to Love My Computer," a testimonial from one woman about the evolution of her family's relationship with the computer. In Asimov's introduction, he articulated the urgency around women embracing technology. "The future is rushing toward us, and women must not be caught unprepared. It is going to affect the home and family – and it is also going to affect the status of women in general" (Asimov, 1983, p. 66). He went on to describe the myriad ways that the computer could assist with both superficial and important household tasks including keeping track of chores, organizing a Christmas list, checking weather conditions, banking, shopping, working from home, and educational uses. But, he argued that the most important role of the computer was the one it could play in women's rights. "We have reached the point where we understand that in an ideal world there should be no such thing as 'women's work' or 'men's work'; and that each individual, regardless of sex, should be allowed the opportunity to work at whatever he or she can do well, for a recompense determined by the nature and quality of the work, not

by the sex of the worker" (Asimov, 1983, p. 67). He emphasized a need for women to become more prominent in the worlds of science and math to truly earn equality without actually mentioning the term "feminism." This article provided what has become a rarity in current women's publications: the idea of women's rights and equality to men in regard to the usage of technology.

Coincidentally, earlier in 1983, in the February issue of *Ms. Magazine*, an article was published with a similar title and emphasis, "Falling in Love With Your Computer." The timing of the *LHJ* article made it appear to be in response to feminist interest in technology, and it attempted to position technology in a manner that both explained and naturalized the computer in women's lives. The *Ms.* article included a personal testimonial on one woman's relationship to her computer, as well as glossaries, how-tos, and buying guides. The *Ms.* article defined ways that women could integrate the computer in their lives, but had a more holistic approach to the relationship. "Well, it's not a machine. More and more, it's – dare I say it in a national magazine? – an extension of *me*" (Van Gelder, 1983, p.37). Rather than emphasizing the ways that computers can facilitate daily household chores, the *Ms.* article positioned technology in such a way that it extended one's capabilities. A sense of urgency was also evident. "It's not a machine, damn it. It's the future" (Van Gelder, 1983, p.38). Van Gelder also emphasized the role that feminists should take in using technology, and expressed a fear that they were not appropriately positioned at that time to fully capitalize on all the benefits.

Both magazines emphasized the need to establish a "loving" relationship with the computer. Visuals in the *LHJ* articles included a woman holding a flower in front of the

computer screen, a close-up of a keyboard that included hands that were purposely portrayed as belonging to a woman and a small child, and a busy woman holding a child in one hand as she pecked away with the other. The *Ms.* article contained a photo of an adolescent-aged girl sitting on a couch playing checkers with a large doll whose upper-part of the body was actually a computer. A later picture included the whole family (mother, father, and child) interacting with the computer/doll in the same situation. Both these articles clearly articulated the desire for computing to be integrated in the home setting. During the '80s and into the '90s, other women's magazines presented computer-oriented features including *Good Housekeeping* ("Welcome to the Computer," September 1991 and "Guide to Buying a Computer," May 1992) and *Better Homes and Gardens* ("Could a Home Computer Help You?" February 1981).

In the mid- to late- 1990s, women's magazines slowly began to cover the phenomenon of emerging Internet and related technologies. Women were enticed to use the Internet, and for many, this was the first introduction to the technology. While other media, such as television advertising, film, and technology publications provided images of the Internet, these were the first that were primarily targeted at women. But in so doing, these publications often stayed true to their existing tenets of hearth and home, rather than exhibiting the potential of the new technology beyond feminine stereotypes. For example, articles in *Cosmopolitan* often discussed online dating or cybercheating as a result of its focus on dating and relationship issues. Publications like *Good Housekeeping* and *Redbook* emphasized women's role in mothering, providing articles about using the Internet for homework assignments (Berger, September 1996) or the evils

that exist for children online ("Protect Your Kids Online," May 1997; Trebilock, April 1997; "Are You a Netaholic?" February 1999). Later these publications positioned the Internet as a source for beauty advice (King, February 1998) or shopping (Jones, May 1998; Trebilock, September 1998; Finnegan, September 1998).

At the same time, feminist publications were also engaging in discourse around the Internet. True to their missions, many articles about the Internet focused on activism and women's rights. In the late '90s, *Ms. Magazine* started a semi-regular department called "Techno.fem" in which articles about women and Internet technology were the focus. A few years later, *Better Homes and Gardens (BHG)*, the women's service magazine with the largest circulation ("Paid Circulation in Consumer Magazines," 2003), introduced its own regular department called "Tech@Home." In addition to the regular column, *BHG* also featured short 2-page articles on parenting with technology and selecting software during the same time period. By contrasting these two publications' approaches to covering the topic of Internet technology, we can see the different discourses around technology that women negotiated prior to going online. The articles identified for this analysis spanned 1997-2001 with 10 articles found for analysis in *Ms.* and 14 for *BHG.*

Better Homes and Gardens was founded in 1922 as *Fruit, Garden, and Home*, but changed to its current name two years later. For over 80 years, it has been the primary service magazine targeted at women, providing advice on domestic issues such as cooking and homemaking. Owned by Meredith Corporation, the *BHG* brand is associated with cookbooks and other home publications, a television network, and a Web

site. Meredith itself is a conglomerate of home and living publications and interactive media.

Ms. Magazine was first published in 1971 and was the first commercial magazine to clearly embody a feminist perspective. Started by Gloria Steinem, Elizabeth Forsling Harris, and Patricia Carbine, *Ms.* began as a special issue of *New York Magazine*. It quickly became a forum for the unique vision of feminist ideas and political coverage. Over the years, *Ms.* has experienced several ownership changes and a retooling as an ad-free publication. It is currently owned by the Feminist Majority Foundation. *Ms.* began operating MsMagazine.com in 1999.

In analysis of these publications' approaches to their technology columns, what is most striking at first is the selection of the names of these departments in their respective publications. Each seamlessly integrates common technology metaphors with the publication's notions about the role of women. In *BHG*, the name "Tech@Home" utilizes the common @ symbol that is used in all email addresses and has come to be associated with communication technologies. The symbol cleverly links the association with technology as a communications medium and the idea that it can and should be used in the home, very specific to the mission of *BHG*. In contrast, the *Ms.* column's "Techno.fem" title employs the "dot" or period in its name, which is reminiscent of its usage in Web addresses. The phenomenon of "dotcom" became the moniker that described the entire industry of computer technology during the 1990s. By using the "dot" as the anchor, *Ms.* was able to integrate the abbreviated versions of the words "technology" and "feminism" to clearly identify the focus of the section.

Another difference is that of the length and composition of the articles in the two publication's columns. The "Tech@Home" section commonly consisted of one page, several pieces of cartoon-type artwork of computers or technology symbols often personifying the computer with human attributes or providing it with other elements of the home, and several short blurbs on a variety of topics. Other tech-related articles in *BHG* did not exceed 2 pages. When photographs were used, they were usually positioning the computer in a home environment, like the kitchen, and did not include images of women interacting with them. One photo showed a computer, stylized specifically for women, the Audrey by 3Com, atop a desk that was cleverly integrated into a bar in clear view of the kitchen table. By naturalizing the computer in the home, *BHG* reinforced the idea that women's natural place is in the private sphere, even in regard to their use technology (MacDonald, 1998, p. 48). Often, information boxes were provided to show prices, company names, or where to buy products mentioned in the column. In regard to sources, many of the articles in *BHG* were written by men.

In contrast, the *Ms.* articles in "Techno.fem" were 2-4 pages in length, were very feature-oriented, included actual photography, and focused on the accomplishments of women in technology. This is typical of the general layout and design of all *Ms. Magazine* articles during the same time period. Often women were photographed using computers or positioned with technology in a manner that expressed power and authority with the technology. When graphics were used, they typically depicted women using computers for the specific purposes in the articles, like a woman sitting on the end of her bed using the computer to gain online advice about morning-after birth control measures

or depicting images of girls as anime in an article about online gaming. One is introduced to material designed for what Fraser termed a "subaltern counterpublic," depicting women's usage of computing in a way that challenges the idea that the public sphere is reserved solely for men's discourse (Fraser, 1992, p. 123). All but one of the *Ms.* articles were written by women.

The topics covered in both publications were computer or Internet technology, but the focuses of the articles in each were very distinct. The *BHG* articles held the discourses of online shopping or making technology purchases, usage of technology in the home, identifying the Web as a "dangerous place," family uses of the Web for photos and communicating with family, and emphasizing its simplicity of use with "how tos" and instructional tips. For example, one article in *BHG* started, "Active families mean active kitchens. What better place to serve up a home's computer?" (Weeks, October 2001) Another article equated the ease of computer use with other household items. "With their 'instant-on' feature and one-touch buttons, new Internet appliances are easier to use than the microwave ovens and bread machines they sit next to on the kitchen counter" (Hicks, July 2001).

The *Ms.* articles had a completely different emphasis. Obviously, there was a slant toward feminism and activism, but also there was a continued focus on identification of gender stereotypes, power and control within technology, and the discussion of gender equity in computing. *Ms.* most commonly used the profile strategy in its articles, often identifying women entrepreneurs and discussing their interests and backgrounds with technology. Articles in this category included women computer

pioneers (Bayard, May/June 1998), Janese Swanson creator of Girl Tech (Mahoney, January/February 1997), Stacy Horn founder of echonyc.com a women's online community (Burgher, July/August 1997), women using hacking for activism or hacktivism (Muhammad, December 2000/January 2001), and Buffy Sainte-Marie, singer, composer, and activist, and how she utilized computers in her work (Edut, August/September 1999). The majority of these profiles focused on the ways that women were empowering themselves by using technology for activism and political causes.

The articles in *Ms.* covered much more divisive and nontraditional topics than those in *BHG*. For example, the article on women computer pioneers, "Computer Pioneers – Visible at Last!" (Bayard, May/June 1998) highlighted the suppression of women from computing history. It described six women who became the world's first computer programmers during World War II. The women were invisible from the history of computing because their photographs were rarely published, and when they were, it was usually in the back of publications without identification. The women themselves were modest about their accomplishments, feeling that they were merely performing their jobs. However, recognition came when they were inducted into the Hall of Fame of Women in Technology in 1997.

A more controversial topic was found in a *Ms.* article in the April/May 1997 issue about using the Internet to obtain information about emergency contraception. "Public awareness about emergency contraception is downright poverty stricken, despite the wealth of information on the Web" (Stoller, April/May 1999, p. 91). The article identified

the Internet as the perfect site to gain access to information 24 hours a day, and identified several sites available to women needing contraceptive information.

Empowerment in the *BHG* articles was limited to an article on using technology to gain a college degree online. This article used a case study approach to describe a woman who was having trouble juggling career and home, and decided to gain her degree online to avoid time away from her family (Ehlers, 1999, p. 162). The article provided a balanced approach to the issue by reporting on another woman who did not enjoy her experience with online education, and it also provided several items of valid advice, resources, and questions to ask before embarking on an online degree.

Women's role as parent, however, is not forgotten in *Ms*. *Ms*. articles often dealt with issues of gender equity in online information and games versus the "Web as a dangerous place in which children must be protected" discourse found in *BHG*. The *BHG* articles were preoccupied with online safety. In "Keeping Kids Safe on the Internet," Gaines compared teaching Internet safety to children to teaching them to safely cross the street or to avoid talking to strangers. The article catered to parents' fears by quickly identifying that "pedophiles, scam artists, bigots, and other unsavory characters wander cyberspace" (Gaines, 1999, p. 70). Warning parents that merely ignoring the issues is insufficient, the article continued to explore the topic of finding Internet filtering software, working together with children on the computer, and providing advice for using chatrooms and protecting online privacy. The article concluded with a list of resources on safe Web surfing. One of the major sources in the article was a group called PC Dads, thus identifying the paternal figure as the authority when it comes to online issues.

Another *BHG* article, "Web-Savvy Kids," opened with "danger lurks on the Internet. But by setting guidelines and staying involved, parents can provide needed protection" ("Web-Savvy Kids," May 2001, p. 120). The harms identified were detachment from friends and family, declining grades, and Internet predators. Such fear tactics create an environment in which technology is approached skeptically and cautiously, as opposed to openly and creatively. The discussion of filtering software consisted of names of products along with pricing, but did include one sentence on their limitations, "keep in mind, though, that filters can make regular Web surfing clumsy and may also filter valuable sites" ("Web-Savvy Kids," May 2001, p. 122).

While *BHG* offered the topic of censorware, or filtering software that can protect children from evils online, *Ms.* offered a balanced article on the issues around censorship and the ways in which filtering software accomplished it. This *Ms.* article explained the legal landscape of online censorship and the pros and cons of filtering software, used to control children's access to pornography or other inappropriate online content. But the article also pointed out the limitations and dangers of implementing such filtering software. "Filter software is often bigoted and misleading, with a potential to reshape the entire online information landscape" (Eisenberg, September/October 1998, p. 39). The article further pointed out that some of the filtering products mentioned in the article, when tested, blocked information about feminism and women's issues including Now.org and Planned Parenthood.

Additionally, the article in *Ms.* highlighted problems with the Internet School Filtering Act, a bill proposed by Senator John McCain to implement filtering software in

public places, limiting funds to students in the highest need areas. Accompanying the article was a list of links on selected sites against censorship. The goal of this article was not to sell filtering software products or to tout their usage, but to present a balanced account of the benefits and limitations of such approaches. This is a difficult topic for a women's service magazine to attempt, because it could be construed as being "anti-child" to be opposed to controlling access to online content. *Ms.*' balanced perspective on the landscape of filtering software shed light on the complicated nature of online censorship that was lacking in the *BHG* articles. The BHG approach left readers unaware of the limitations of these products and focused solely on what they considered their priority of protecting children.

The *BHG* column provided reviews of software and electronic toys and games for children. A regular feature in the December issues of 2000 and 2001 included articles on "best software picks." In conjunction with the Christmas season, the articles highlighted educational software and games including reviews and pricing. But these articles were mostly devoid of discussions of gender equity or implications of gender stereotypes. One exception was in the 2001 issue for the game Backyard Basketball, in which the software was described as "one of the few that breaks the stereotypes by putting boys and girls from several ethnic groups on the roster, some of whom are physically challenged" (Buckleitner, 2001, p. 94). But, this description did not go beyond this brief statement, and discussion of implications of stereotyping were not forthcoming.

The *Ms.* articles often dealt with these issues of gender equity in children's technology, providing more of an in-depth, feature approach. One of the entrepreneur

profiles was of Janese Swanson who started the company Girl Tech, a company with a goal "to invent technology-based products that are 'cool,' easy to use, and fun for girls between the ages of six and twelve" (Mahoney, 1997, p. 37). Another article addressed the gendering of girls' computer games and the associated problems in attaching feminine stereotypes. "By focusing on popularity and fashion – even if this is what some girls want to focus on – the majority of them reinforce the very same stereotypes they purport to combat" (Eisenberg, January/February 1998, p. 84). Another article discussed the prominence of Web sites targeted at teen girls and analyzed differences in those that provide empowering content, like free space for home pages and Web design tutorials, and those that are simply interested in marketing to teens. "Most sites are being marketed to teens instead of being made for teens" (Johnston, 2000, p. 82). But sites designed by teen girls themselves provide much of the interesting content and bypass the need for ads or sponsorships. The article provided a list of many sites where the girls themselves designed and created the content.

In contrast to the women's service approach of *BHG* and the mainstream feminist approach of *Ms.,* another women's publication during the same timeframe was providing its own spin on Internet technology. The magazine *Working Woman*, not surprisingly, was one publication that distinctly focused on women's business potential on the Web. This publication printed articles dealing with the usage of technology in work and business, and included profiles of successful women in technology, including Kim Polese, the inventor of the Java programming language (Fryer, 1997), as well as articles on how to implement Web pages (Plesser & Edmonton, 1997), and women's role in the

information revolution (Brame, 1996). A special issue on "Wired Women: Making Technology Work for Us," was published in 1996, and a cover story in January 1996 focused on Bill Gates' feelings about women and technology (Povich, 1996).

Working Woman provided a compromise between the stereotypical discourses found in *Better Homes and Gardens* and the mainstream feminist messages provided by *Ms*. Focusing on work life, but with an ear toward issues of parenting and family, these articles provided women with a serious look at the potential of computing while offering a more diverse perspective on its usage. *Working Woman*, however, did not include discussions of gender equity, feminism, or online identity creation in the manner found in *Ms.*, thus providing a more liberal approach to women's equality when using technology. But what is interesting is that all three publications had a clear emphasis on the role of women in the family, with different ways that technology would manifest in that role. For example, while the *BHG* articles emphasized safety and the *Ms.* articles emphasized gender equity, the *Working Woman* articles around parenting highlighted using technology as a way to facilitate work and spend more time with one's family. "The good news for women is that technology permits them to do more from home so they can spend more time with their children" (Brame, June 1996). The *Working Woman* articles also dealt with the discourse of women performing multiple roles in society and how that could contribute to reticence about computing. "It's easy to understand why a woman with a job, a family and multiple other responsibilities wouldn't dive right into something that can be intimidating and time-consuming" (Hafner & Kretchmar, June 1995).

But in 2001, and after 25 years in print, *Working Woman* folded, and its remaining property *Working Mother* was sold to Working Woman Media to continue in publication. The decision to focus on *Working Mother* was made due to the slow economy and the tech downturn (Lombardi, December 2001). Content regarding the Internet on *Working Mother* has been more like the service magazines mentioned above. For example, articles about the Internet in *Working Mother* since 2001 included the titles "Protecting Children Online" (Bertagnoli, 2000), "High-tech Homework Helpers," (Orr, 1997), and "Cybershopping Savvy" (Doner, 1997). When *Working Woman* was absorbed by *Working Mother,* that ended the publication's potential for intelligent content regarding women's usage of the Internet for business and entrepreneurship.

It is not surprising to find that when these publications discussed Internet technology, they did not create new discourses to describe this new phenomenon. They relied heavily on the discourses that were common and comfortable with their audiences. *BHG* naturalized the Internet by catering to women's fears and insecurities about parenting and by providing easy "how-to" advice to navigate the difficult technological terrain. *Ms. Magazine*, on the other hand, used its feminist and activism approach to provide alternative discourses around the Internet, showing women using computers in positions of power and exploring issues of technology in a more complex manner. *Working Woman* utilized the discourses of the challenges associated with working and raising a family. But with many more women being exposed to the discourses of the women's service magazines than the feminist publications, and with the demise of *Working Woman,* it should not be surprising that the predominant discourses about

technology that could migrate to online spaces are likely in line with those of home and family.

What this analysis has done is to analyze the general climate that women were encountering when they were first learning about the Internet, and the ways that different print publications targeted at women were addressing these issues. By understanding the discourses used in print regarding the Internet, we can now better appreciate why certain discourses are manifesting in women's spaces online. These differences were expected, but this analysis highlights the lack of variation within publications while identifying the breadth of discourses that exist when looking across publications. Similar trends are expected when analyzing Web content on online gendered spaces.

Chapter 5: Overview of Online Gendered Spaces

During the late 1990s and early 2000s, the number of Web sites of all types increased exponentially. The Google search engine currently indexes more than 8 billion Web pages on the Internet. And, according to the Online Computer Library Center, there are more than 8 million unique Web sites, with more than 3 million housing publicly available content 1998-2002 (OCLC.org, 2002).

Sites that were demographically focused on gender have also developed and propagated over time. In some cases, the sites were established to target desirable markets. Other sites were created to solicit support or to gain momentum for particular causes and organizations. Still others evolved due to the low cost and ease of publication and the potential for garnering a vast audience. This chapter provides examples of the diversity of gendered spaces available online. The mission, history, and evolution of sites are detailed, along with screen shots of their interfaces over time.

Sites that specifically target men are not as common as those for women. This is due in part to the propensity for most sites, at least in the early days of the Web, to be targeted at men, without being overtly so. For example, many sites that focused on technology and pornography were implicitly dealing with a primarily male target audience. But over time, as gender becomes a significant demographic on the Web, sites targeting men's issues have increased in number.

The sites for this study were selected based on extensive research on the Web using the search and directory features of both Google and Yahoo. This chapter

illustrates the broad ways in which women are represented on the Web. A significant amount of attention in this study is given to iVillage, the most prominent site for women on the Internet. Understanding its background was critical in comparing it to other sites. The Lifestyle section also includes a site that is targeted to men, AskMen.com, that was used as a comparison to iVillage in Chapter 6. Additional women's sites that were reviewed, but not selected for analysis are described in Appendix A.

It is important to mention that the sites selected for analysis, while not specifically dealing with sexual orientation, for the most part, have implicit heterosexual undertones. Gay or lesbian issues were only found on the feminist sites, and with the focus of the study being Internet technology, only one article dealt with using technology in this context. While not part of the original intention of this study, ramifications of these issues will be discussed in the final chapter.

LIFESTYLE SITES

iVillage (www.ivillage.com) - With the tag line, "The Internet for Women," iVillage claimed to be the definitive Web destination dealing with women's issues online, with sections on parenting and pregnancy, health and fitness, beauty and relationships, home, money, and many other topics. In October 2004, according to comScore Media Metrix, iVillage ranked 26th among the Top 50 Web and Digital Media Properties with more

than 16 million unique visitors in the United States ("comScore Media Metrix Announces Top 50…," November 14, 2004).

But iVillage has gone through major changes since its inception. Started in 1995 as a general purpose, community-driven Web site with no specific gender orientation, it has since transformed into a site that caters exclusively to women. It is headquartered in New York City with stock publicly traded on the NASDAQ exchange. iVillage's founding partners were Candice Carpenter, who was president of Q2, president of Time Life Video and Television and vice president of consumer marketing at American Express; Nancy Evans, the creator and founding editor of *Family Life* magazine and former president of Doubleday; and entrepreneur Robert Levitan, founder and former president of YearLook Enterprises. Carpenter was able to raise $67 million in venture capital in 1998 during the heyday of the dotcom boom ("An Internet Site Focused on Women," August 3, 1998*)*. Later that year, NBC acquired a minority stake in iVillage ("NBC Buys Internet Stake," December 1, 1998).

In March 1999, the initial public offering of iVillage was deemed a huge success on Wall Street, with shares selling for three times that of the offer price on opening day ("iVillage Stock Ends Higher…," March 20, 1999). Investors were initially enthusiastic about iVillage's potential to reach women and a business model that supported sales of products and services as opposed to advertising. Early competitors of iVillage were Women.com and the Hearst property Homearts.com, but the iVillage empire has since purchased Women.com. Hearst has abandoned Homearts.com and now owns an equity position in iVillage. In August 2003, iVillage acquired Gurl.com, a leading online

community for teenage girls that offers articles, advice, resources, games and interactive content.

iVillage, in a relationship with Hearst, also provides Web site production and hosting services for magazine sites including *Cosmopolitan, Esquire, Good Housekeeping, Marie Claire, Redbook, and Town & Country*, and the Hearst Teen Online Network of *CosmoGirl, Seventeen,* and *Teen Magazine* ("iVillage Selected for Production…," January 13, 2004). In September 2003, iVillage entered an agreement with the MSN Women Channel to provide content in the categories of Beauty, Fashion & Style, Relationships, Home & Food, and Career & Money. Along with its other properties and affiliations, iVillage has defined itself as the major source of information for women on the Web. Its properties now include Women.com Networks, iVillage Parenting Network, Inc., Public Affairs Group, Inc., Promotions.com, Inc., iVillage Consulting (formerly iVillage Solutions), and Knowledgeweb, Inc. (operator of the Astrology.com Web site). The combined company is now the most powerful women's site on the Web.

While iVillage's stock price is a mere shadow of the three-digit highs of its IPO (its price on Dec. 15, 2004 was $6.09) and it has yet to turn a profit, its mere survival amongst a sea of dotcom closures is evidence of its success. Its critical accomplishments include awards for Best Women's Network by *Yahoo! Internet Life* in 2000 & 2001, and *Media Magazine's* Top 10 Online Publisher and Best Online Publisher in the Women, Family and Health category. Future plans for iVillage include television shows, book

publishing, fee-based, self-help services, and branded products in the areas of vitamins and baby items ("iVillage Inks Television Series Deal …", June 23, 2003).

iVillage's initial premise, "Internet for the Rest of Us," targeted baby-boomers, then changed to focus on the female demographic by emphasizing contributors and community, rather than providing original content. "We offer the intimacy of community with the scale of media," Carpenter said, describing iVillage as "utilitarian." (Napoli, August 3, 1998, Sec. D., p. 6). Thus iVillage.com was never confused by whether or not it was a feminist offering or what its responsibilities were to its users, it simply provided an enabling technology to facilitate community. How that technology was ultimately positioned and categorized to attract the biggest audience resulted in the iVillage of today.

Like many other dotcom companies, iVillage's stock declined in 2000, and with it came an exodus of many of the company's top managers. In 2000, Carpenter stepped down as CEO and was replaced by Doug McCormick, an executive with LifetimeTV. Carpenter remained on the board of directors for a short time thereafter, but ultimately severed her ties with iVillage. As McCormick took the reins, the company began its slow transformation from community enabler to content provider. Now, five of the seven top managers at iVillage are men, including the recently appointed Chief Financial Officer, Steven Elkes. Concerns about a male-headed women's Web property were expressed in the media, but iVillage public relations chief, Carl Fischer responded with "Is Nickelodeon comprised of a management of children? You get the best person for the job'' (Dash, June 20, 2004, Section 3, p. 2).

iVillage has articulated its mission in different manners as exhibited in the transformation of its Web site over time. iVillage's original mission was to "humanize cyberspace" and to make connections between the online world and the real world (See Figure 5-1)[2]. The first version of the site displayed a simple interface with a few sections on The Company, The People, Advertising, Shopping, Promotion, and Feedback. It included links to related sites, Parent Soup, a parenting site hosted by iVillage, About Work, for career information, and Vices and Virtues, a site for sharing obsessions and confessions. At this point, the site had not identified its prominently female demographic, but it was clearly focused on demystifying the new technology and making its usage efficient for everyone.

Figure 5-1: Original iVillage home page, 1995

[2] Archived screenshots of Web pages courtesy of the Wayback Machine at www.archive.org.

By 1997, the community focus was even stronger. The Web site stated "iVillage's goal is to create and build targeted communities online that help people with the real issues of their real lives. The communities are owned by their members who are the driving force behind the subjects they are most passionate about" (iVillage site from archive.org, Oct. 1997).

In 1998, the tag line on the site changed to "The Women's Network." Additionally, a banner with the slogan "Your Home on the Web" was added, further emphasizing domestic usage of the site (See Figure 5-2). At this point, iVillage's sections had matured to include Career, Fitness & Beauty, Food, Health, Money, Parenting, Relationships, Shopping, and Work From Home. Banner ads made their first appearance, and sections for message boards and chats dominated the right side of the home page.

Figure 5-2: iVillage home page, 1997

By the end of 1998, the banner had been modified to "Your Home on the Web. For the Stuff that Really Matters." Advertising on the home page continued, and tips and expert advice dominated the content, evolving the site closer to the women's magazine model found on sites like *Cosmopolitan* and *Good Housekeeping*.

By 1999, iVillage.com was still known as "The Women's Network," but now the banner read "Solutions for your Life," substituting the importance of community for the idea that solutions to problems could be found on the site, another step toward the women's magazine model.

In mid-2000, the Career section had been removed, but replaced by the last button in the list "Working Diva." At this time an agreement was made with ZDNet, a subsidiary of the Ziff-Davis publishing company, to provide technology content in a channel called Click! Computing (See Figure 5-3). ''Women use iVillage.com to solve problems -- in this case, to make informed decisions about how to maximize daily productivity through technology,'' said Candice Carpenter, co-founder and CEO of iVillage. ''Together, ZDNet and iVillage.com will offer the quality and depth of coverage our members need, in a format that is comfortable to them'' (**"**ZDNet to be Premier Provider…" May 26, 1999).

ZDNet executives also viewed the relationship as beneficial. ''Technology is increasingly impacting the daily lives of women, both professionally and personally,'' said Dan Rosensweig, president and CEO of ZDNet. ''Our relationship with iVillage is about empowering women with quick and easy access to the technology tools and information they need to enrich their lives and maximize their productivity. We're excited about introducing this large, influential audience to the high-quality, breadth and depth that have become the trademark of ZDNet content'' (**"**ZDNet to be Premier Provider…" May 26, 1999).

Figure 5-3: iVillage home page, 2000

Click! was organized to provide technology content for different levels of users, within a comfortable environment. Using labels such as Newbies, Basic Betties, and Techno Divas, the environment was meant to be friendly and non-threatening. Interactive tools, such as a "Clickability Quiz," helped users assess their levels of expertise. The "Clicktionary," a comprehensive plain-English resource for computing terms, and "Computer Tour" that walked users through basic computer questions were additional features of the section. Additionally, expert advice was provided to help women through technology issues and purchases and to help them understand how to use technology effectively and safely with their children ("Click! the new iVillage.Com

Computing Channel…," August 31, 1999). iVillage no longer features the Click! Computing section, although some of the content is still available.

By 2001, "Solutions for Your Life" had been completely abandoned, and "The Women's Network" was removed in 2002. iVillage offered customized content by encouraging a member registration program and by having content selected based on the users age group.

By the end of 2002, the current style of the Web site was adopted. In late 2003, iVillage added the slogan "The Internet for Women" (See Figure 5-4). Currently, iVillage is organized into channels and communities across multiple topics deemed of high importance to women and offers interactive services, peer support, content and online access to experts and tailored shopping opportunities. The major content areas include Babies, Beauty, Diet & Fitness, Entertainment, Food, Health, Home & Garden, Horoscopes, Money, Parenting, Pets, Pregnancy, Quizzes, Relationships and Work. A recent section on Tech-Savvy kids was added in conjunction with Girls in Science and Technology. iVillage facilitates use across content areas by providing a similar look and feel within each area and across the network, resulting in a consistent and strongly branded Web site.

Figure 5-4: "The Internet for Women" added as tag line

The evolution of iVillage, from a community-based site to a comprehensive women's Web property, provides detail about the direction of the company as it has progressed. While the community roots are still evident on the site, with 1,400 message boards and an online dating area, the focus on content that is driven by sponsorships, advertising, and e-commerce now dominate.

AskMen (www.askmen.com) - Sites catering to the interests of men are widely available online, but few of them are overtly specific about their male demographic. Technology and pornography sites primarily target men, and other sites prominent on the Internet, like those for sport, finance, and business, also gear content and advertising for their male clientele. Some men's magazines, including *Esquire, FHM*, and *Maxim,* have Web site components, but these sites were developed primarily to bolster subscriptions to their print product. Few sites offer an overtly demographic focus on men in the same way that iVillage targets women. However, AskMen, a Canadian site similar in focus to iVillage, has been gaining popularity with male audiences.

AskMen is a men's lifestyle site, with more than 5 million monthly readers. Launched in January of 2000, it was conceived as a direct response to the women's sites iVillage and Women.com. It originated with the promise to tackle men's issues beyond sports and stocks. With an emphasis on reader suggestions to drive its content, AskMen provides daily features on dating, fashion, lifestyle, career, and health. By focusing on reader suggestions, a community spirit is maintained, while content is still primarily driven internally.

AskMen has established itself as a destination for those interested in men's issues, and it includes an archive of more than 8,000 articles available for free online. It also has

one of the largest online community memberships with more than 17,000 message board members. The Montreal-based site was started by three Concordia University graduates: Chris Rovny, Ricardo Poupada, and Luis Rodrigues. In January 2001, AskMen became the world's largest men's lifestyle magazine, in terms of number of unique visitors, according to Nielsen/Net Ratings – bigger than its competitors in the men's site category. ''We're three times larger than *Maxim*, and I like to say we edge out *Playboy* by a bunny,'' says Ashkan Karbasfrooshan, vice-president media relations and ad sales (Kucharsky, 2002, p. 20).

The subjects discussed on the site are similar to those on women's magazines – celebrity gossip, sex and dating tips, handling money, and popular culture, but AskMen presents content with some differences. Positioning itself as distinctly male, AskMen has featured articles like "Rough Sex" and "Using a Penis Pump." Readers are asked to respond to stories and suggest their own, and are credited for these ideas. "Our success," says President Ricardo Poupada, "is a result of the fact that all of our content is a direct response to the requests of readers" ("One-year-old AskMen…", June 4, 2001).

While the founders claim that the top three subjects on the site are women, sex and fashion, and that power, money, and sports are covered to a lesser extent, a focus on traditionally masculine topics is evident. "We're respectful," Karbasfrooshan says. "Women are our peers, our partners. We want to make sure that men understand women better. It's more of a sign of the 21st century, as opposed to a throwback to the 20th century." About 25% of visitors are women, and they're more active than men in e-mailing the site (Kucharsky, 2002, p. 20).

Askmen launched well before *Maxim* developed its own Web site. AskMen's founders claim that *Maxim's* site is similar but focuses on women and sex. "When we started, *Maxim* had no site," Poupada said. "But the *Maxim* site looked a lot like AskMen giving some people the impression that AskMen was copying *Maxim's* (See Figure 5-5). But they focus on babes, and we want to take it up a notch" (Nebenzahl, May 30, 2002, p. 17). In 2002, AskMen redesigned its site with a different color scheme to avoid the comparison to *Maxim*. While the interface has changed over time, the major sections of the site have remained consistent. Now, the AskMen site displays additional features such as sponsored links, banner advertising, and a Book section. While most of AskMen's content is open and free of registration requirements, a member area exists for a virtual diet and health trainer and a gaming section. A popular feature of the AskMen site has become its Top 99 Women edition.

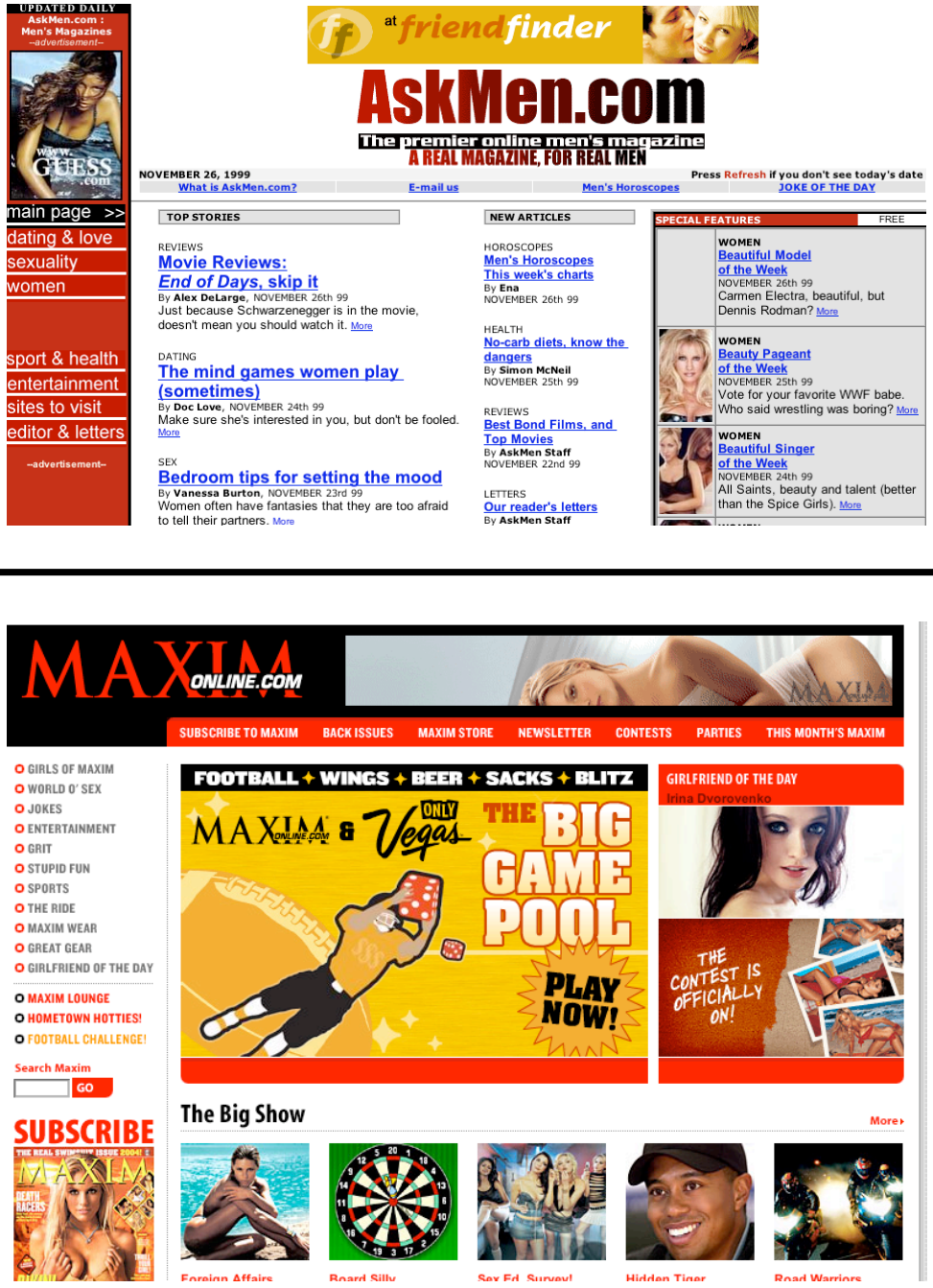


Figure 5-5**:** Early AskMen.com and Maxim.com interfaces

The site's main demographic is men, 25 to 49 years of age. Its mission is expressed by their founders as helping men to be better at being men (Nebenzahl, May 31, 2002, p. 17). More specifically, its mission from the Web site is:

> To offer men candid advice, that is useful, practical and entertaining. AskMen.com address issues regarding dating, women, fashion, money, fitness, and entertainment. Offering advice that is too complicated or unrealistic does not serve any viable purpose, therefore it deals with topics that can be incorporated into men's daily lives (http://www.askmen.com/whoarewe.html).

The company turned a profit after the first year, mainly through advertisers who buy based on the number of unique users, plus the AskMen shops, where products are available for events like Mother's Day and Valentine's Day. They employ nine full-time employees, and a tech team in Virginia handles the Internet traffic (Nebenzahl, May 31, 2002, p. 17). Major advertisers include Universal Pictures, Viagra, alcohol and cigar companies, and online dating sites. Like women's magazines and sites, AskMen uses a strategy that often includes links and tie-ins to advertisements from editorial content.

AskMen states that its market share, as calculated by HitWise, an independent market research company, was 34.58% of all surfers interested in men's lifestyle content. This was compared with *Maxim* Online at second with 17.09% market share, *FHM*'s site was third with 6.85%, and *Men's Health* was fourth with 5.62% ("AskMen: Who Are We," 2004).

In the future, AskMen may syndicate some of its content, and is proposing branded merchandise and an offline print counterpart. But they will likely solicit partners

for those activities. ‘‘Doing it ourselves is taking unnecessary risk, so we probably would not do it ourselves,’’ says Karbasfrooshan (Kucharsky, 2002, p. 20).

AskMen’s site is structured much like a women’s site, with sections for Dating and Love, Sexuality, Men, Women, Health & Sport, Fashion & Lifestyle, Power and Money, and Entertainment. The home page is predominantly blue, but a subdued light to royal blue, and is complemented by a taupe border and gold banner (See Figure 5-6). The style has been toned down from earlier versions in which red was the predominant color, to differentiate itself further from *Maxim*. Each section has a different primary color associated with it, but the style is repeated through logo and layout. The logo displays its claim of “5 million readers a month” and defines itself as a “Men’s Portal.” The top of the page includes a search feature that allows the user to search the entire site or a particular section.

Figure 5-6: AskMen.com home page, 2004

The AskMen site has toned down the babe-and-sports appeal on the front page, but its presence is still known with several pictures of beautiful women and a regular feature on "Bachelorette of the Day," partnered by Date.com. But in comparison with *Maxim*, the AskMen site has less focus on objectification of women's bodies.

Technology is not a major part of the site, with the exception of the feature, "Cool Site of the Day." But, often articles about Internet surfing fall into other categories including Power & Money, Health & Sports, Fashion & Lifestyle, and Sexuality. Other features include the Top 99 Women, Top 200 Albums, Joke of the Day, and Horoscopes. A member section features a Diet/Muscle Guide, Pickup Guide, Newsletter, contests, and message boards.

At the end of each article on the site, credit is given to the reader who suggested the article, and other users have the opportunity to suggest an article or to discuss the topic on a message board. A related links section is available, but is often used for sponsored links and advertisements. Links to related articles are also provided.

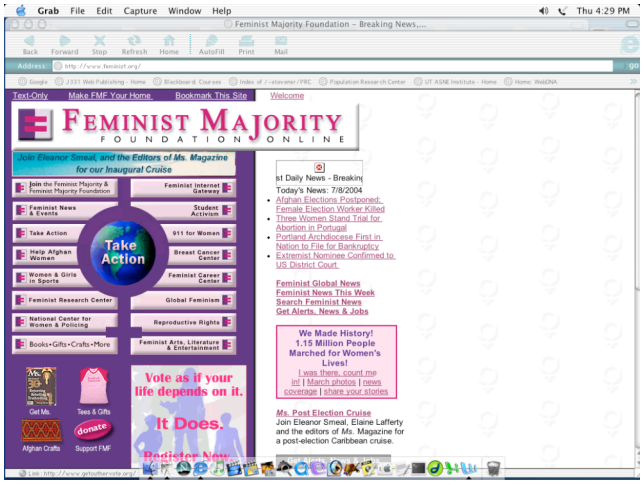
FEMINIST SITES

The National Organization for Women (www.now.org) is the largest organization of feminist activists in the United States. NOW has 500,000 contributing members and 550 chapters in all 50 states and the District of Columbia (NOW History, 2004). Since its founding in 1966, NOW has worked to bring about equality for all women. NOW works to eliminate discrimination and harassment; secure abortion, birth control and reproductive rights for all women; end all forms of violence against women; eradicate racism, sexism and homophobia; and promote equality and justice in our society. The Web site, which has been operating since the mid 1990s, provides information on starting new chapters, news and press releases, and resources on women's issues. Now.org has provided many articles on using Internet and Web technology, particularly in the realm of using these resources to create and support NOW chapters.

The NOW site started in 1996 as a very basic home page that provided information about rights activism and feminist news (See Figure 7). While the interface

has changed significantly over the years, the mission and goals of the site remain the same.

Figure 5-7: Original NOW home page, 1996

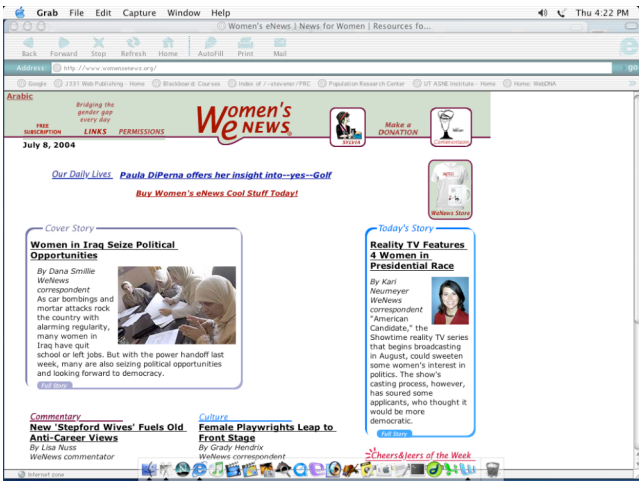


The Feminist Majority Foundation (www.feminist.org) was founded in 1987. It is an organization dedicated to women's equality, reproductive health, and non-violence. In all spheres, FMF utilizes research and action to empower women economically, socially, and politically. Its belief is that feminists - both women and men, girls and boys - are the majority, but this majority must be empowered (Feminist Majority: Welcome, 2004).

Led by President Eleanor Smeal, FMF's research and action programs focus on advancing the legal, social and political equality of women with men, countering the backlash to women's advancement, and recruiting and training young feminists to encourage future leadership for the feminist movement in the United States. To carry out these aims, FMF engages in research and public policy development, public education programs, grassroots organizing projects, leadership training and development programs, and participates in and organizes forums on issues of women's equality and empowerment.

The Feminist Majority Foundation Online provides information and resources about FMF causes and offers the Feminist Daily Wire News Service that lists news items important to women's issues. The main goal of the site is to support the activist programs and activities of the organization. Articles discussing Internet or Web

technologies focused mainly on using these resources for activism and political purposes. The Feminist Majority's first presence on the Web was in 2001. The site has changed little since inception.



Women's eNews (www.womensenews.org) provides news and covers issues of particular concern to women, offering a woman's perspective on public policy. Through freelance writers from around the world, Women's eNews offers articles on politics, religion, economics, health, science, education, sports, legislation, and commentary.

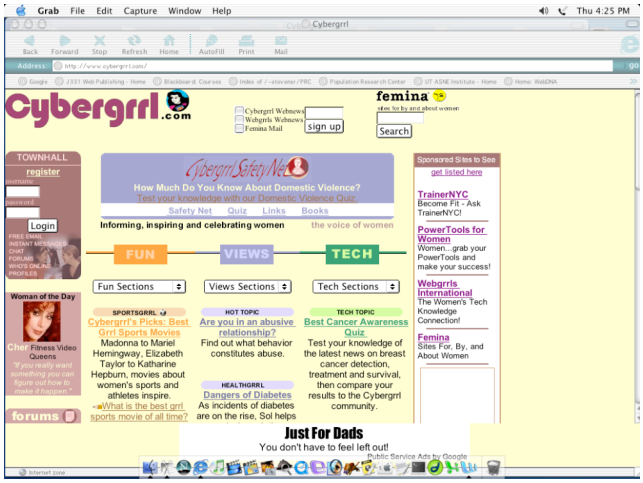
Women's eNews became independent on January 1, 2002. The site grew out of a 1996 roundtable discussion conceived and funded by the Barbara Lee Family Foundation and hosted by the NOW Legal Defense and Education Fund ("Women's Enews: About Us," 2004). After additional research on the need for a media outlet to distribute news of concern to women and the opportunity to provide women's voices to commercial media, NOW Legal Defense undertook in 1999 to create Women's eNews as an Internet-based news service for all women, with a special emphasis on being a resource for commercial

media. Two years later, NOW Legal Defense determined Women's eNews could maintain its success and stand on its own.

Women's eNews has been widely tapped by other media from coast to coast and around the globe, from such leading media outlets as *The Washington Post*, *the Los Angeles Times*, the *Chicago Tribune*, *the New York Daily News*, the *Buffalo News, San Jose Mercury*, the *Birmingham News*, the *Pittsburgh Post-Gazette*, *the Spokane Spokesman-Leader* and MSNBC to newspapers in Kuala Lampur and the Philippines ("Women's Enews: About Us," 2004). Women's Enews provides a Rich Site Summary (RSS) feed that allows other sites to feature its news articles.

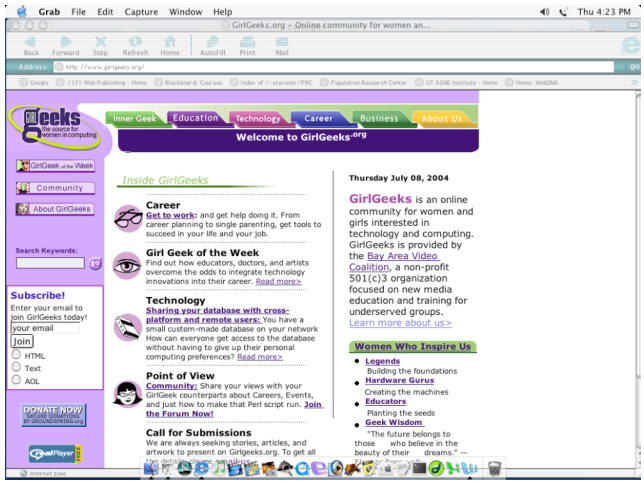
The site began in 2000, with few material changes to the interface over time.

TECHNOLOGY SITES



Cybergrrl, Inc. (www.cybergrrl.com) has a network of women's websites reaching women between the ages of 18-45+ and offering sponsors and advertisers relationship-building opportunities to reach its audience. Cybergrrl, Inc. includes the sites for Cybergrrl (content and community), Webgrrls (networking), and Femina (search). Cybergrrl was started in 1995 by Aliza Sherman, as a compilation of links for women on the Web (See Figure 5-8). As of this publication, Cybergrrl is temporarily unavailable due to a site redesign.

Figure 5-8: Original Cybergrrl home page.

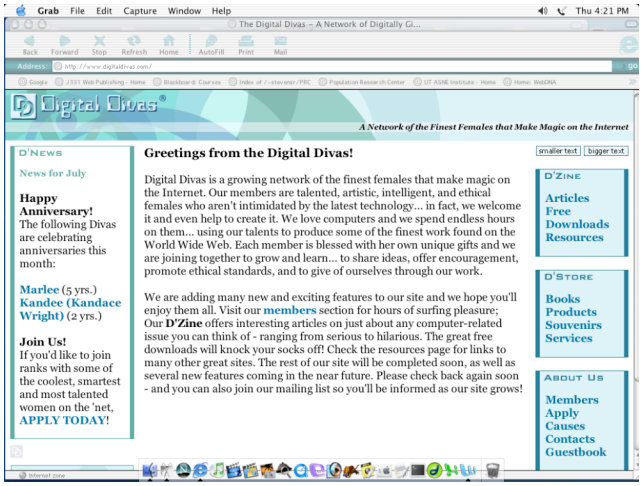


Girlgeeks.org (www.girlgeeks.org) is the website formerly known as GirlGeeks.com! GirlGeeks is now a resource provided by the Bay Area Video Coalition (BAVC.org), a non-profit organization dedicated to making media and technology resources available to everyone, particularly traditionally underserved segments of the population.

The mission of GirlGeeks.org is to encourage women to develop careers in technology by providing training and video-based seminars, offering low-cost courses, providing job placement services, and offering resources on media technology. BAVC

received a grant from the Markle Foundation to reestablish GirlGeeks online and to create a training DVD.

The Web site first appeared in 2001, and has changed little since its inception.



Digital Divas (www.digitaldivas.com) is a network of women that provide digital content on the usage of the Web to its users. Its tag line on the Web site is "A Network of the Finest Females that Make Magic on the Internet." Founded in June 1998 by Dana Whitmire, Digital Divas recently settled a lawsuit with Microsoft for rights to the name Digital Divas. Microsoft had been using the Web site DigitalDiva.com in conjunction with content on its MSN portal, but Digital Divas had been using the term three years prior to Microsoft. In 2000, Microsoft agreed to cease use of the name and domain and converted content to the Microsoft Digital Lifestyle Adviser. Content for women on MSN has most recently been found on the Women's Central section.

While the interface has changed since the original home page, the content provided has remained consistent throughout its history (See Figure 9). Through its D'Zine it provides articles, downloads, and resources. The D'Store showcases books, products, and services. A members section features links to users home pages and Web logs.

Figure 5-9: Early Digital Divas home page

This chapter provided a small sampling of the major women's and comparable men's Web sites. Additional sites exist that also target women, but there are too many to list here (See Appendix A for descriptions of additional women's Web sites not included in this analysis). Sites in the health and parenting realm, as well as numerous e-commerce sites consider women their target demographic. But since these sites do not list women overtly in their titles or within their mission statements, they were not considered for inclusion in this analysis. Also on the Web are sites that support the large variety of women's magazines. Some of the Hearst publications sponsored by iVillage include *Good Housekeeping, Cosmopolitan,* and *Redbook.* Others like *Better Homes* and *Gardens, Glamour, and Jane* have Web sites, but these publications do not provide

extensive content, merely providing teasers to print content and information on subscribing to the publication.

Further analysis was performed on the selected sites and the results are detailed in the next several chapters. The next chapter compares two gendered lifestyle sites, iVillage and AskMen, and discusses the differences in frames around Internet technology. In doing so, this analysis begins to track the ways in which gender manifests online in regard to computers and Web usage.

Chapter 6: Lifestyle Sites: iVillage and Askmen

Women are now online and using Internet technology in vast numbers. Rather than relying on other media for their representations and attitudes about the Internet, women are equally represented online and can choose any Web destination that they wish. Did the masculine beginnings of the Internet and stereotyping in women's media influence the ways in which Web sites are representing women's relationship with technology? Or are women's Web sites breaking the mold and describing women's relationship with the Internet in ways that are non-traditional and counter to feminine stereotypes? To answer these questions, a logical first step was to compare the representations of Internet technology on two gendered, lifestyle sites: iVillage and AskMen.

As stated in the previous chapter, the most popular online site for women is iVillage (www.ivillage.com). It garners more Web traffic and has, over the years, either acquired or outlived it nearest competition in the lifestyle segment. Other Web sites may cater to women and family issues, like those focused on health, style, or food, but iVillage is clearly the leader in sites with an overtly female demographic.

Sites that focus on the interests of men are also available online, but none garner the vast audience of iVillage. Men's magazines *Esquire, FHM*, and *Maxim* have Web site components, developed primarily to bolster subscriptions. However, AskMen (www.askmen.com), a Canadian site similar in focus to iVillage, has been gaining popularity with male audiences. With similar age demographic and content categories, it

serves as a useful comparison with iVillage for the ways that gender manifests differently online, particularly in regard to technology. Since iVillage has adopted the tag line "The Internet For Women," it is important to understand its vision of women's use of Internet and Web technology. This chapter analyzes the major frames around Internet technology and the ramifications of the differences in these frames between the two sites.

In order to provide a comprehensive analysis of Web content, this study utilized both hand-coded and computerized content analyses. The Web sites iVillage and AskMen were selected because of their prominence as Web properties with gender-specific demographics. Both sites had similar emphases and purposes, focused primarily around lifestyle issues. To identify articles in which the Internet or Web were discussed, each site was searched using the search string "Internet OR Web OR online." Both search engines performed similarly in that they provided responses based on relevance, so search pages were analyzed until the relevance was deemed outside the scope of this project (for example, pages that merely mentioned the Web in regard to Web links for a topic unrelated to the Internet). In some cases, a snowballing technique was used when certain articles held links to other technology articles. But in most of these cases, these items ultimately appeared on the search list.

The search yielded 115 articles for iVillage and 46 for AskMen, the difference being attributed to the longer tenure of iVillage (founded in 1995 vs. AskMen in 2000). Each article was copied and included in a text file for each site. The files were reviewed to eliminate possible duplicates or articles that were deemed irrelevant to the analysis. Interestingly, the number of words in the iVillage file (58,710) was only 13% more than

that of AskMen (52,006), indicating that the articles related to Internet technology were longer and more detailed on the men's site.

Several issues were encountered when dealing with content on these two sites. Most of the articles on iVillage were unsigned, so the source of the content was unavailable. The only articles that were consistently attributed were those that were identified as being part of the Click! Computing section. Unlike traditional news and information sources, many articles on both iVillage and AskMen did not have dates associated with them, making longitudinal analysis impossible. In addition, after the initial analysis in January 2004, several of the articles were no longer available on the sites. It is important to reiterate that this analysis provided a snapshot in time of the nature of Web content, and it is difficult to assess trends that existed prior to this study.

The hand-coded analysis included reading each article and assigning a general topic or frame. At first, frames were selected without limitation, but ultimately patterns emerged that indicated several categories:

- **Home/Family** – articles that focused on using technology in the home, including how to protect children from online pornography and stalking and how to select appropriate technology products for the family.
- **Business** – articles dealing with business, investment, and careers, including profiles of business executives or owners.
- **Dating/Relationships** – articles that addressed issues around dating and relationships including online dating services.
- **Sports/Gambling** – articles dealing with playing or watching sports and using the Internet for online gambling.
- **Technology** – articles that discussed technology including instruction articles as well as computing issues.

- **Health** – articles dealing with health-related issues including depression and isolation attributed to computer usage.
- **Privacy** – articles dealing with issues of online privacy including Internet scams.
- **Lifestyle** – articles that addressed the areas of fashion, shopping, auctions, banking, and travel.
- **Pornography/Sex** – articles that discussed topics related to cybersex, cyberporn, and online cheating.

The computerized analysis was performed with the software program VBPro, developed by Dr. Mark Miller at the University of Tennessee. This program allowed input of text files to provide reports of frequency, cluster mapping, and disproportional term usage.

RESULTS

The hand-coded analysis indicated that for the women's site, the frames of Technology and Home/Family were prominent, while for men, the frames of Business, Dating/Relationships, and Sports/Gambling were the most significant (see Figure 6-1). While AskMen indicated on its mission statement that its demographic was men aged 18-49, the role of men as husbands and fathers was rarely discussed on this site, as the category of Home/Family did not contain any articles.

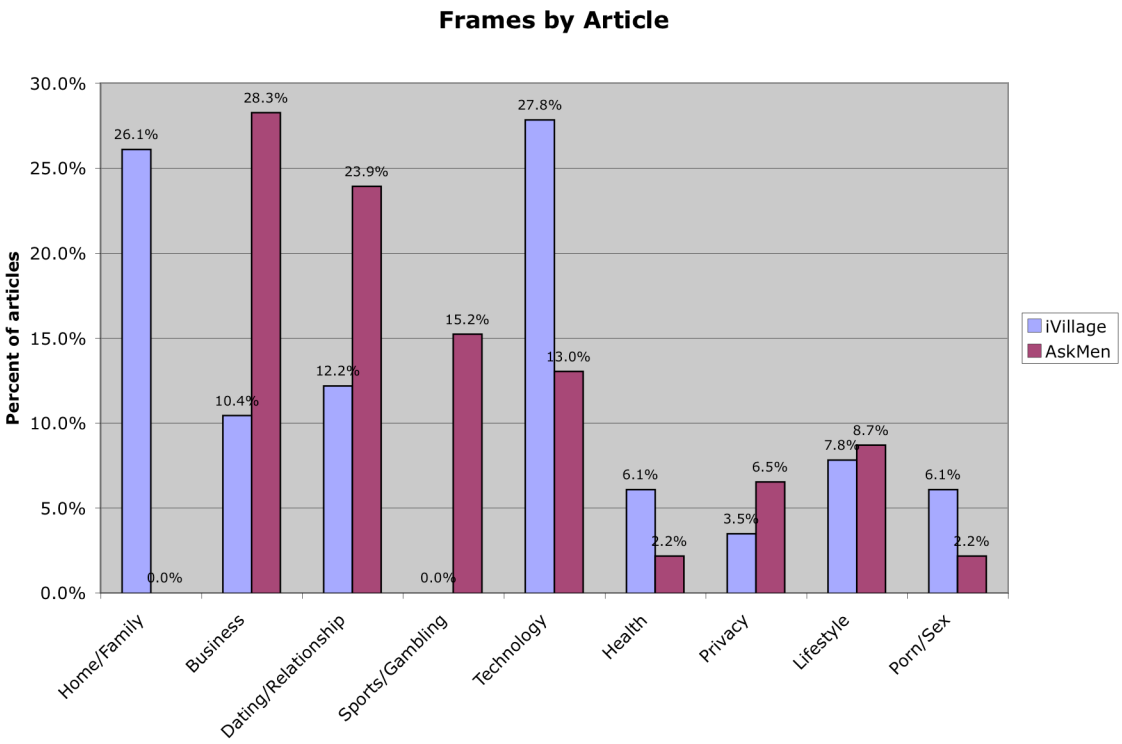


Figure 6-1: Frames by article as a percentage of articles on iVillage and AskMen

Neither site discussed the issues of pornography at length, although iVillage had more discussion of the dangers of cybersex and cybercheating. The low presence of pornographic topics on the AskMen site is unusual compared to men's magazines like *Maxim* or *FHM*, but can be attributed to attitudes by the site's founders that women are to be respected. Women are also recognized as an important secondary demographic, because about 25% of AskMen's visitors are women (Kucharsky, 2002, p. 20). Looking at the design of AskMen, it does prominently feature beautiful women, but they are shown in less provocative poses than many other men's sites or publications.

In ranking frames on each site, distinctly different patterns emerged with little correlation between the two sites in terms of their emphases when discussing technology. The rank-order or Spearman's correlation was calculated at .076, indicating little similarity (Table 6-1).

Rank of Frames by Site

	iVillage	AskMen
Technology	1	4
Home/Family	2	9
Dating/Relationship	3	2
Business	4	1
Lifestyle	5	5
Health	6.5	7.5
Porn/Sex	6.5	7.5
Privacy	8	6
Sports/Gambling	9	3
	Spearman correlation	0.076

Table 6-1: Rank and correlation of frames for iVillage and Askmen

The files were submitted to VBPro to analyze language across articles to see if similar frames emerged as in the hand-coded analysis. This was relevant to analyze the presence of general language strategies as opposed to overall topics of articles. The first analysis compared the frequency reports of each file and provided a list of terms that were used disproportionately in each file. Table 6-2 illustrates that iVillage utilized terms that had to do with home and family in regard to Internet technology more frequently, while AskMen's terms were focused on investment, dating, and sports or gambling.

iVillage	AskMen
Health	Stock/Stocks
Kids	Woman/Women
Email	E-Commerce
Home	Gambling
Access	Investors
Parents	Market
Child/Children	Ad
Information	Company/Companies
Family	Billion
Programs	Poker
School	Case/Bezos
Phone	Sports
Son	Price
	Employees
	Industry

Table 6-2: Terms used disproportionately by iVillage and AskMen

The frequency reports were used to develop a codebook to analyze terms associated with each of the nine frames indicated above. Two additional frames were added for political and activism categories as the analysis of other types of sites progressed (See Chapters 7 and 8). While there were no articles on either site that were coded in these frames, their inclusion is to test if language around these categories was present.

An initial analysis was submitted to the VBMap feature to analyze clusters of terms to determine the relevance of the original frames. The codebook was then refined and submitted to the coding feature of VBPro (See Appendix B). The results are available in Figure 6-2. What this analysis clearly demonstrates is that for the men's site,

terms describing business, technology, sport, and dating were prominent, and for the women's site, terms emphasizing home/family and technology were dominant.

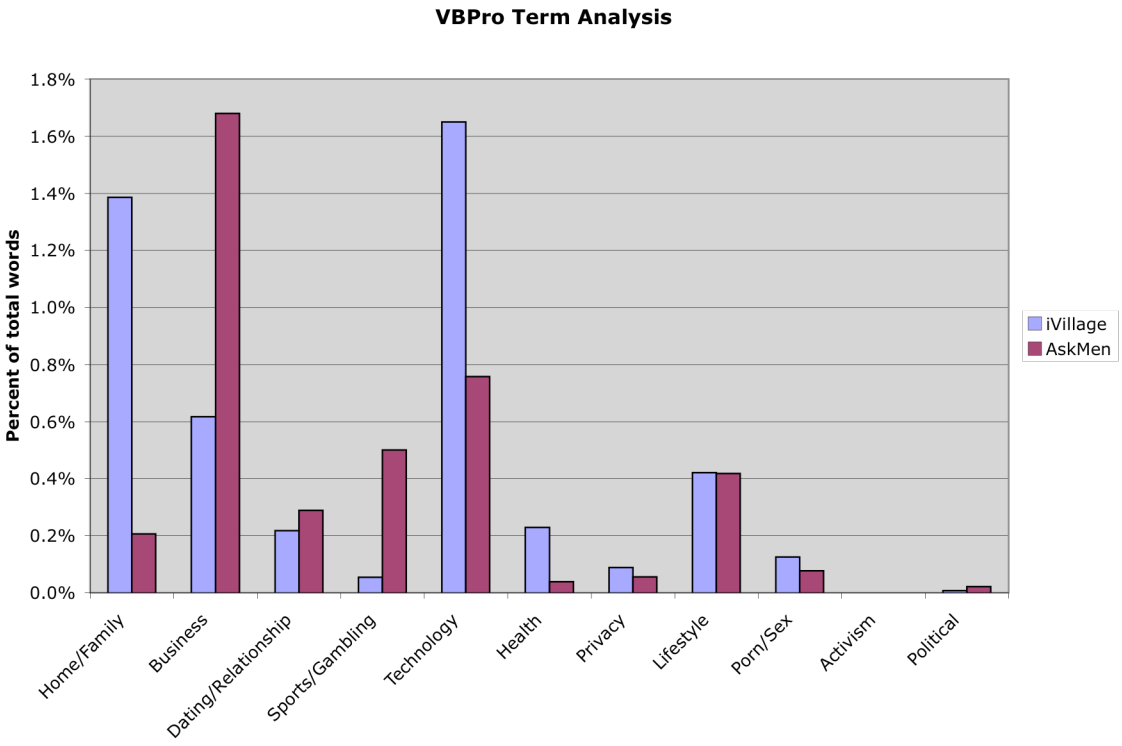


Figure 6-2: VBPro term analysis as a percentage of total words on iVillage and AskMen

A t-test yielded significant differences ($p < .05$) in frames between the two sites in the areas of Business, Sports/Gambling, Dating/Relationships, and HomeFamily. These were the key areas that were identified as the main frames of the two sites in discussing technology (see Table 6-3).

VBPro Analysis - Differences by frame				t-test
	iVillage	AskMen	diff	p-value
Home/Family	1.38%	0.21%	1.18%	0.00
Business	0.62%	1.68%	-1.06%	0.00
Dating/Relationship	0.22%	0.29%	-0.07%	0.01
Sports/Gambling	0.05%	0.50%	-0.45%	0.01
Technology	1.65%	0.76%	0.89%	0.91
Health	0.23%	0.04%	0.19%	0.37
Privacy	0.09%	0.06%	0.03%	0.62
Lifestyle	0.42%	0.42%	0.00%	0.05
Porn/Sex	0.12%	0.08%	0.05%	0.63
Activism	0.00%	0.00%	0.00%	n/a
Political	0.01%	0.02%	-0.01%	0.08

Table 6-3: T-test of significant differences by frame for iVillage and AskMen

DISCUSSION

As mentioned above, one of the most prominent frames for using the Internet on the iVillage site was the Home/Family frame. This is consistent with women's service magazines like *Better Homes and Gardens* that reinforce women's role in the public sphere of the home and their role as mother and primary caregiver. It also resonates with research performed by Tuchman (1978), McCracken (1993), and Ferguson (1983) in examining the discourses found in across women's magazines that represented issues of hearth and home focused on women as a commodity audience. The most common type of article in this frame dealt with strategies for protecting children from harmful online content. Titles of these articles included "Keeping Kids Safe Online" (2004), "Kids Not Surfing Solo on the Web" (2004), "Pornography: Protecting Your Teen Online" (2004), "Monitoring Teens on the Internet" (Giannetti, 2004), "7 Ways To Protect Your Kids on the Internet" (2004), "10 Rules of Internet Safety for Kids" (2004), and "Staying Safe Online: Tips For Managing Your Kids' Online Experience" (2004). The article, "Keeping Kids Safe Online" (2004), included suggestions for parents in identifying off-limits subjects, where to place the computer in the home, how to start a dialogue with your children about appropriate online behavior, and using tools to monitor children's activities.

Other articles dealt specifically with the usage of online filtering software ("Is Cyber Patrol a Good Program?" Ivey, 2004; "Should I Use an Internet Filtering Program?" Ivey & Kemper, 2004). None of these articles addressed the issue of censorship around filtering software, mimicking the same trend found in women's service

magazines. Often content was geared toward protecting boys specifically from online evils, such as pornography and violence in video games ("Pornography: Protecting Your Teen Online," 2004; "Video Games: Finding a Balance," 2004; "Curbing Boys Attraction to Violent PC Games," 2004). In "Pornography: Protecting Your Teen Online" (2004), the passage started with "This is not an issue of 'normalcy' but of guidance. A focus on his behavior as normal may lead you to ignore, rather than influence, your son's development at this critical juncture." "Video Games: Finding a Balance" (2004) is written specifically in regard to boys. "Your son is living in a culture that is inundated with video games and other electronic toys, television, computers and the Internet, with glorified violence in each of these media."

Other articles in the Home/Family frame dealt with the use of the Internet in education, but as it related to children's usage. "At What Age Should Kids Start Learning the Computer?" (2004) and "Using the Computer to Teach Critical Thinking" (2004) both dealt with issues of using the computer as a learning tool. "Choosing Educational Software" (2004) dealt with providing parents information about how to get the most value from scholastic software programs. Another article entitled "Cyberschools: Coming to a Screen Near You" (2004) described online resources for facilitating home schooling.

Framing the Internet as a family activity was the focus of an article entitled "Seven Ways for Families to Compute Together" (2004). In it, the author stated that "most families know that a computer can help with plenty of household tasks. It can manage the family finances or help find a new recipe to placate a picky eater. However,

there's a lot more a computer can do than take care of humdrum chores. It can be a great 'family connectivity' tool, bringing parents and children together."

Another article entitled "When Moms Go Back to School, More are Heading to Cyber U" (2004) dealt with using the Internet for distance education for the woman herself, but clearly defined the benefits of cyber education in regard to working it into a mother's busy schedule. "More than 1 million strong now log on rather than commute to class, and the odds are good that even the most harried of today's working parents can find programs that fit their busy lives." An article entitled "10 Books to Help Parents Learn the PC" (2004) included recommendations for publications with patronizing titles such as *The Little PC Book: A Gentle Introduction to PCs for Dummies* and *The Internet for Dummies*. While this article discussed books that would be helpful for learning Internet technology, it was framed in regard to its usage as a parent by recommending the titles *The Internet Kids & Family Yellow Pages* and *The PC Dads Guide to Becoming a Computer-Smart Parent*. The latter title is of interest in that it frames the usage in terms of fathers, yet this reference is found on the women's site.

One iVillage article entitled "What's So Great About the Internet?" (2004) began by encouraging women to go online to find out "what all the fuss is about." "But if you either don't have access to a computer or are scared of the things you've heard about the Internet, there's a second best solution: Talking to other people who go online." This comment is like many on iVillage that promote the usage of its Web site to connect people. It provided the following reasons for "moms to join the Internet revolution," including staying in touch with friends and family, keeping isolation at bay, and finding

information on interests such as recipes, chatting with friends, learning a language, banishing boredom, and saving money by shopping online. These discourses reinforced women's role as the facilitator of family communications and by providing strategies for helping them deal with the isolation involved in the private sphere.

None of the articles on the AskMen site dealt with issues of children, family or educational uses of the Internet thus supporting their role in the public sphere. Conversely, iVillage did not include articles discussing the usage of the Web for sports or gambling, while many articles on AskMen dealt with the usage of the Internet for these pastimes including "WWF.com: Who Should It Belong To?" (Simmons, 2004), "Online Sports Gambling" (Simmons, 2004), "How to Play Online Poker…and Win" (Willer, 2004), "Gambling Safely on the Internet" (Glazer, 2004), and "Should Online Sports Gambling Be Banned?" (Simmons, 2004).

Consistent with men's public sphere expectations, the Business frame was the most prominent on the AskMen site. These articles covered several different themes. Job hunting and career advancement articles had titles like "The Cache of an Internet Job" (Gomez, 2004) and "Finding the Right Job Online" (Harrison, 2004). Articles on stock trading and investments included "Avoiding the Pitfalls of Online Trading" (Rodrigue, 2004), "Watch for the Internet Stocks to Takeoff" (Poupada, 2004), "Internet Stocks Ready to Rebound" (Poupada, 2004), "The Best Online Investment Research Sites" (Rodrigue, 2004), "Real Winners of E-Commerce" (Poupada, 2004), and "Our Magic 10 Undervalued Tech Stock Picks" (Poupada, 2004). Business profiles included those of

Amazon CEO Jeff Bezos ("Jeff Bezos," 2004) and America Online founder Steve Case ("Steve Case," 2004).

iVillage also had articles that met the criteria of the Business frame, but they were oriented quite differently. Most of the articles dealt with encouraging a work-at-home strategy for women. "Hot Home Business: Web Designer" (2004) listed the skills and equipment needed to run a Web-based business from home, provided estimated start-up costs and expected earnings, and gave suggestions for how to break into the field. "9 Tips for Setting Up a Business Online" (2004) provided step-by-step information on how to perform market research, register a domain, sign up with a host, launch and maintain a site, and form a support network.

The main purpose of the profiles on iVillage was to "find out how women like you are living the work-from-home dream, and how you can too, with these success stories" (Parlapiano & Cobe, 2004). The women profiled were often described as "momprenuers of the month." Profiles included the owner of an Internet Gift Shop, the creator of online scrapbooks, and several Web designers. None of these women could be considered household names or leaders of large companies in contrast to Bezos and Case, mentioned above. Dianne Lillie, the creator of online scrapbooks, said her favorite thing about an online business was "I love having a creative outlet that doesn't take me away from my children. As a full-time mom, my children are my first priority" (Parlapiano & Cobe, 2004).

Only one article on iVillage discussed the usage of the Internet for job hunting ("Quick and Easy Guide to Posting Your Resume Online," 2004), and there were no

articles on iVillage that discussed online stock trading or investments. However, a few articles discussed the usage of the Web for online banking ("Questions to Ask Before Banking Online," 2004; "The Truth About Online Banking," 2004).

Among articles explicitly about technology, there were also significant differences. On the iVillage site, there were many articles that dealt with simple technology instructions or questions about terminology, including "What is a Cookie?" (Feldman, 2004), "How Do I Clear My Cookies?" (2004), "What is FTP?" (Feldman, 2004), "What's the Difference Between the Web and the Internet?" (Feldman, 2004), "Cable Modems Demystified" (2004), "How to Get Online" (Bates, 2004), "How to Change Your Browser Font" (Giles, 2004) and "Why Does My Modem Disconnect?" (Feldman, 2004). These articles used simple and familiar language to answer these questions. For example, one article entitled "What Does '404 Error' Mean?" started with "the familiar (and so annoying) '404 Not Found' is standard computer-speak for 'I am so sorry, but I cannot find the file you just asked me for'" (Feldman, 2004). And in the article entitled, "What's the Difference Between the Web and the Internet?" the following description was provided. "Information that travels over the Internet does so in a variety of languages (known as protocols.) Think of the many languages that are spoken over the telephone wires. In order to have true communication with the person on the other end, you both need to speak the same language" (Feldman, 2004).

In comparison, the tech article titles on AskMen assumed a higher level of fluency with Internet issues and the topics were more exploratory and in-depth. Titles included "Should Internet Content Be Free" (Alexander, 2004), "Weblogs: The Cyber Journey"

(Alexander, 2004), and "RIP: Napster" (2004). In the article on Weblogs, the author noted:

> depending on your interests and previous experiences, a weblog, or "blog" as it is also called, may sound like either a piece of computer equipment or a dangerous sexual practice. In fact, a Weblog, which has been around since 1990, is essentially a person's way of glamorizing themselves and their hobbies -- be it via computer games, politics or travel – online (Alexander, 2004).

The article entitled, "RIP: Napster," started with "peer-to-peer file-sharing technology has emerged as the biggest innovation to hit the high-tech community: the Network is the Computer" (2004). This article discussed the history of networking, the relationship to Napster's music sharing program, and the potential of P2P's future use. The ways that each of these sites approached the technology frame, men's usage of technology is construction as more thoughtful and insightful and women's as basic and remedial. The widespread ramifications of these divergent discourses include the ways that women are marginalized in technology education and careers (Margolis & Fisher, 2002).

One article identified the "Top 5 Weird Internet Sites" (2004), which included thesmokinggun.com, that provides verification of scandals and conspiracies, and uselessknowledge.com that offers trivia, quizzes and facts. In these technology articles, there was a clear assumption that men used the Internet for enjoyment, frivolity and wasting time. Women's usage on iVillage was framed as more purposeful, typically as it related to their role in the home and family. By framing women's usage in very specific roles, it limits the creative empowerment associated with the use of technology.

Both sites had a number of articles in the Dating/Relationship frame. This was the second most common frame in the article analysis of AskMen and was one area in which the content on each site was relatively similar. Some AskMen articles analyzed the concept of online dating as in "How the Internet Changed Dating" (Muller, 2004) and "Meeting Women Online" (Cross, 2004). iVillage had several testimonials of online dating success and failure ("The Three Second Date," 2004; "Single Mom Finds Love Online --How You Can Too," 2004) and included several articles in advice-column style with question-and-answer format (""I fell in love with a man online, but I'm not attracted to him in person," 2004; "If we're intimate on-line, what will happen when we meet?" 2004).

Both sites included articles with quick tips and lists of rules on how to utilize online dating to meet your match. AskMen was particularly obsessed with lists in this frame ("Internet Dating: The 3 Golden Rules Of Instant Messaging" (Conway, 2004), "6 Don'ts Of Online Dating" (Conway, 2004), "Internet Dating: 5 Clues She's Ready For A Date" (Conway, 2004) and "Top 10: Ways To Get Rejected Online " (Croft, 2004)). There seemed to be more of a preoccupation with safety on iVillage, mindful that women are more likely to be targets of abuse, but also highlighting the assumption that women need increased protection. "Always, always set up your first date at a highly trafficked public place, at a reasonable time of day -- late afternoon or early evening. A familiar restaurant or coffee shop is fine, but not at midnight. Never meet at one of your homes or places of employment" ("How to Meet an Online Love Face to Face," 2004). This is consistent with Tuchman's early research of women in on television. "They are

symbolized as child-like adornments who need to be protected or they are dismissed to the protective confines of home" (Tuchman, 1978, p. 8). AskMen seemed more concerned with understanding cues from women one meets online as in "Internet Dating: 5 Clues She's Ready For A Date" (Conway, 2004).

The sites were similar in their approach to improving the image of online dating, changing it from a bastion for losers to something that was cool and modern, and a valid way to meet potential mates. In iVillages's "Cosmo's Guide to Online Dating" (2004), it starts with "If you think the online dating arena is a bastion of socially inept people who can't master bar-scene trolling, check your watch -- Internet dating has actually become cool." In the same vein, an AskMen article stated that:

> men have the misconception that online dating services are only for ugly guys that can't get dates, or for those that are afraid of rejection. But many men worldwide are opting for this new service, simply because it's at arm's length and because you don't have to put on an act to impress women online -- at least not face-to-face (Cross, 2004).

Another article stated that "more and more people are flocking to the Internet in search of true love, and I'm not just referring to computer geeks who couldn't get dates to save their lives; I mean everyday folk who are just looking for an alternative" (Papadakis, 2004).

Other differences between the sites existed in frames that were less prominent, but deserved mention nonetheless. Each site had at least one article dealing with Internet addiction. On the iVillage site, the article dealt with this type of addiction as a problem to contend with in terms of one's relationships. "Your husband is having an affair with the

Internet. No wonder you are upset! It is one thing to have a hobby, but not coming to bed with you means it is a hobby that is interfering with your marriage relationship" ("Dealing with an Internet Affair," 2004). This discourse addressed the role that cybersex played in undermining the sanctity of marriage. Other articles addressed Internet addiction in relation to cybersex ("My Husband Frequents Sex Sites on the Internet," 2004). But addiction on the AskMen site was directly addressed in regard to the individual user.

> Does your wife, girlfriend, parent, or sibling ever tell you that you are spending too much time on the computer? That you are neglecting your responsibilities? That you are becoming more irritable and unsociable? Have you ever stayed up until 3a.m. surfing the Web? Downloading music, backgrounds or porn? Well, if you've answered "yes" to at least one of these questions, then you might discover that you are, indeed, addicted to your screen and cyberspace (Bartekian, 2004).

Both sites had fairly equal representation in the Lifestyle frame. This category was composed of several topics including shopping, travel, and banking. The iVillage site had several articles addressing the concept of online shopping including "How to Buy a Family Computer" (2004), "Online Gift Registration: Get the Facts" (2004), "Buy Wholesale Furniture Online" (2004) "Ordering Contacts Online" (2004), and "Plan a Party Online" (2004). Note that most of these articles dealt with shopping for the family or home, constructing women as the key consumer of the household. AskMen only had two articles on online shopping, "How To Make Secure Purchases Online" (Richer, 2004) and "How To Buy a Computer Online" (Becker, 2004) Interestingly, the iVillage

article on buying a computer was addressed specifically as a "family" decision, while the AskMen article had a more self-centered approach on the individual's purchase.

This analysis indicates a gendering of technology discourse on these two lifestyle sites. Not only are frames around femininity and consumerism generally present on iVillage, but even in regard to specific topics, like Internet technology, these same stereotypical discourses apply reinforcing women's role in the private sphere as mother, wife, and caregiver. For a technology that was initially lauded for its democratizing and equalizing potential, Internet content continues to divide users across gender lines. The reasons for this are multiple and varied, but may reflect the commercial nature of the two sites that were under study. Both sites have missions to generate profit through meeting the needs of their established target audiences. In doing so, each site is not likely to contradict conventional gender roles, but instead will create spaces that emulate the success strategies of other media. Therefore, it is no coincidence that iVillage's content mirrors that found in mainstream women's magazines like *Cosmopolitan* and *Good Housekeeping*, and not more radical publications, like *Ms*. or *Bust*. And, while AskMen seemed to have a toned-down approach compared to men's magazines like *Maxim* and *FHM*, its primary frames, even in regard to Internet technology, revolve around traditionally masculine topics like sports and business, emphasizing men's place in the public sector.

Feminists are concerned about the trend of the Web becoming dominated by feminized content. "To look at a site like iVillage.com, which is so dominant, I think this is going back to the 1950s for God's sake, women worrying about nothing more than

their diet and what they're going to make for dinner," said Dr. Joan Korenman, Director of the Center for Women and Information Technology at the University of Maryland, Baltimore County (Pleticha, 2002). Korenman worried that the next generation of Internet users will not be aware of the possibilities for women beyond the traditional roles of consumer, mother, wife, and sex object.

So, why are these strategies successful, and why aren't women resisting traditional discourses and demanding different content? Women, particularly those unfamiliar with technology, might be more comfortable and at ease with technology when presented with metaphors that they find familiar. By discussing technology in regard to home and family usage or by providing quick tips, these sites may make it seem less threatening and within their realm.

It is also possible that women who read iVillage do so for reasons other than finding technology information. They may be finding pleasure interacting on a gendered space, while disregarding gendered stereotypes and expectations. This relates to research on the pleasures gained in reading romance novels by Radway (1987) or in watching soap operas by Ang (1985).

Another possibility is that on the Web many alternative discourses exist, and the discourses around technology abound. There are many sites that women can access that discuss technology, including *Wired* (www.wired.com) or CNet (www.cnet.com), national news sites like CNN (www.cnn.com), and alternative sites that can provide dissenting views, like Women's Enews (www.womensenews.org), Cybergrrl (www.cybergrrl.com), Digital Divas (www.digitaldivas.com), the Feminist Majority site

(www.feminist.org), and the National Organization for Women site (www.now.org). The next two chapters analyze discourses present on sites that are geared toward women activists and technologists.

Chapter 7: Feminist Web Sites

If mainstream women's Web sites like iVillage are taking on the format of traditional women's media and upholding feminine stereotypes, even in regard to the usage of the Internet, then what are other options for women in finding representations of technology? Feminist sites can provide alternate discourses to those found on more traditionally oriented women's Web sites. An understanding of feminist media is necessary to comprehend the goals and values of publications and Web sites of this kind.

Feminist media have a history dating back to the women's movement of the early 19th century. A number of periodicals were published by activists, including *The Women's Journal*, Susan B. Anthony's *Revolution*. and birth control activist Margaret Sanger's *The Woman Rebel*. These publications had small circulations and few advertisers. Each advocated women's rights and were often the subject of government censorship (Farrell, 1998, pp. 21-26).

At the same time, improvements in the publishing industry and interest in targeting women as a valuable demographic were fueling a boom in mass circulation women's publications with titles like *Godey's Lady's Book* and *Ladies' Home Journal*. The difference in the suffrage activist publications and the mainstream magazines was recognized early on. Writing for *The Suffragist*, Freda Kirchwey called for a "new sort of women's magazine," one that was different than the current offerings that "imbued with one deep purpose – to make a domestic career endurable to all women" (Farrell, 1998, p. 25).

Since the early 1960s, after the publication of *The Feminine Mystique* by Betty Friedan, a groundbreaking treatise on the social relations of men and women, public attention was turned to the ways that mainstream women's media perpetuated gender stereotypes. Many feminist publications of this time encouraged the creation of separate media forms from the mass circulation women's magazines. Based on the second wave of feminism, these publications "were destined to play an important role in the contemporary women's movement," representing the ways with which women could challenge society and visualize their futures (Smith, 1993, p.61). Titles like *off our backs*, a feminist news journal, contained news, information, and satire, but garnered small audiences in comparison to the popular women's publications of the time.

In the early 1970s, Gloria Steinem and others began to conceptualize a new type of women's magazine that would appeal to feminist interests, but compete with the mainstream women's publications. The result was *Ms. Magazine*, which continues today, although its mission and format have changed significantly from the original vision of its founders. *Ms.* is now advertising-free, is completely subscription-based, and is no longer available on the newsstands next to other women's publications like *Good Housekeeping* or *Ladies Home Journal*. More information on the history of *Ms. Magazine* and its representation of Internet technology can be found in Chapter 4.

Later, as second-wave feminism gave way to what is termed post-feminist discourse or contemporary feminism, in which women of different races and walks of life are addressed, publications from women of color started to appear, including *Up Front*, a Black women's newspaper, *Truth*, the newsletter of the Black Women Historians, and the

Pan Asian News, published by the Organization of Pan Asian American Women (Smith, 1993, p. 70). Publications targeting career women, such as *Working Woman* and *Working Mother*, were introduced, although these publications were not specifically identified with feminism. These developments served to broaden the spectrum, as well as confuse the issues, in terms of the roles of women's and feminist media.

Feminist media differs from mainstream women's publications in many ways, but one key difference is in the issues that are covered. Feminist publications pay attention to issues that are often ignored by mainstream publications, such as "the politics of abortion, sexuality, women's health, violence against women, pornography, race and class analyses" (Smith, 1993, p. 67). Feminist Web sites are following this trend by offering alternative spaces to those occupied by sites that are ostensibly targeted at women, but follow a traditional women's magazine model, like iVillage.

The new media environment of the Web offers an opportunity to espouse feminist values. These sites also create opportunities for framing the role of women and the Internet. Three sites with high search profile and traffic, containing significant content regarding the Internet and Web, were selected to be analyzed: the site for the Feminist Majority Foundation (www.feminist.org), the site for the National Organization for Women (www.now.org), and a feminist news site, Women's Enews (www.womensenews.org). These three sites represent a broad range of feminist activism on the Web. The *Ms. Magazine* site was originally considered, but was not selected because it did not include enough content on the topic of the Internet or Web for analysis.

RESULTS

Using the same method as was employed with the lifestyle sites, each site's search engine was used to search for the following terms: " Internet OR Web OR online." The Feminist Majority site yielded 55 articles, NOW had 47 and the Women's Enews site resulted in 36. Unlike the iVillage articles, most of the Feminist Majority and Women's Enews articles included dates. Many on the NOW site were undated. Many articles on all three of the feminist sites were also unsigned. The articles were first coded by hand to determine the overall frame of the article.

In categorizing the feminist sites, very different trends in frames from the mainstream sites were apparent. While both iVillage and Askmen had the primary nine categories described in the previous chapter (Home/Family, Business, Sports/Gamlbing, Dating/Relationships, Technology, Health, Privacy, Lifestyle, and Pornography/Sex), not surprisingly, the feminist sites' Internet articles were focused on using the technology for issues of activism, specifically around abortion, abuse, harassment, gender equality, and the digital divide. Neither iVillage nor Askmen.com had any articles dealing with the topic of activism, nor did they mention the terms "feminist," "feminism," "abortion" or terms related to abortion like "pro-choice," "pro-life," or "anti-abortion" in the articles under study.

The following frames emerged as the sites were categorized:

- **Abortion** – Articles that mentioned the term abortion and dealt with either legal issues or activism concerning abortion.
- **Political** – Articles about political action committees and online voting.

- **Legal** – Articles on sexual abuse, harassment, date rape, and registering sex offenders. Did not include legal articles on abortion or pornography that were included in those specific categories.

- **Activism** – Articles on using the Web to organize a NOW chapter, recruiting volunteers, and participating in Virtual Marches. Did not include activism articles on abortion that were included in the abortion category.

- **Business** – Articles on women entrepreneurs and gender equity in the workplace.

- **Technology/Digital Divide** – Articles concerning the presence of women in tech fields and gender differences in usage of technology; general tech knowledge and technology training.

- **Health** – Articles on using the Internet for Women's Health and Sex Education

- **Porn** – Articles discussing pornographic uses of the Web including legal implications of online pornography.

- **Lifestyle** – Articles addressing lifestyle issues including religion, online gaming, and gender representations and other media issues.

Figure 7-1 identifies the emphases of frames on each site.

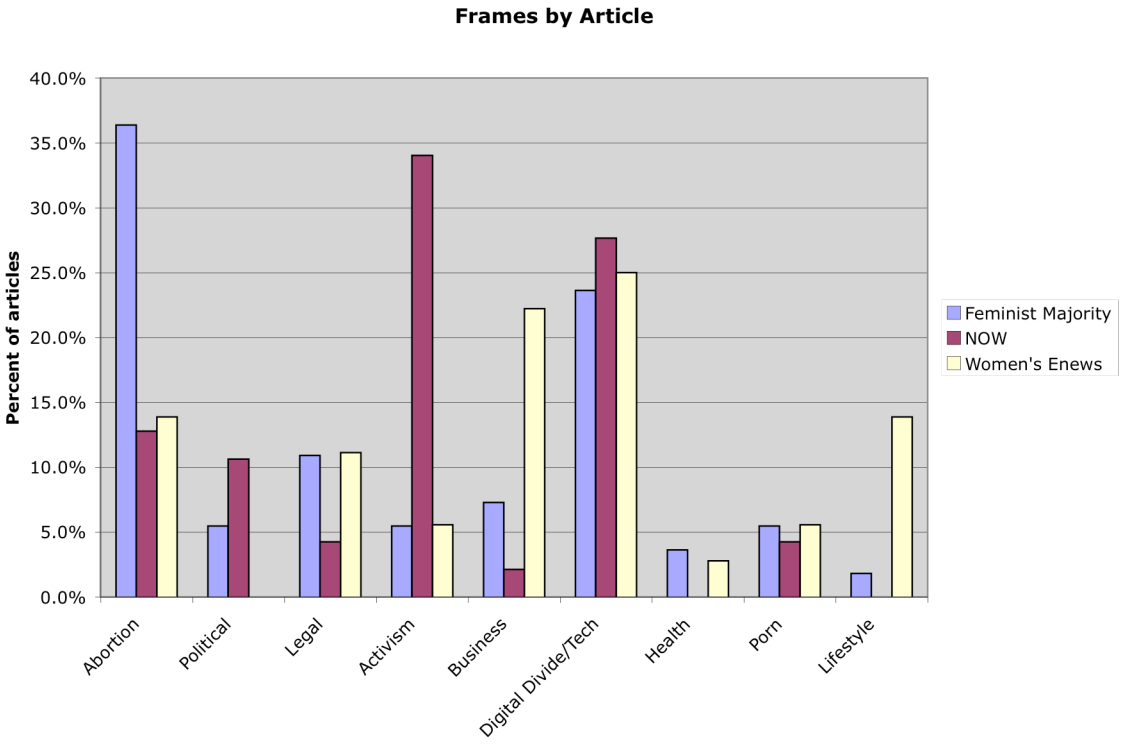


Figure 7-1: Frames by article as a percentage of articles on Feminist sites

In comparing the sites to iVillage, an analysis of terms used disproportionately by each feminist site is show in Table 7-1. This table shows the prevalence of terms having to do with activism, particularly in regard to abortion, and the presence of legal and legislative terminology in discussing the ways that women use the Internet. General differences between the sites show that the NOW site's terms were most concerned with activism through establishing and supporting NOW chapters, the Feminist Majority site was primarily concerned with the legal wrangling of abortion issues, and Women's Enews had more focus on terms having to do with using the Internet for business or technical information.

NOW	Enews	Feminist Majority
NOW	WOMEN	WOMEN
WOMEN	WOMEN'S	ABORTION
ACTIVISTS	TECHNOLOGY	NUREMBERG
RIGHTS	GIRLS	COURT
ABORTION	SCIENCE	ANTI-ABORTION
WOMEN'S	ABORTION	FEMINIST
ANTI-ABORTION	REPORT	PURDY
FEMINIST	LAW	WOMEN'S
ACTION	COURT	GIRLS
CHAPTER	EXECUTIVE	CLINIC
MARCH	VENTURE	RIGHTS
PRESIDENT	WENEWS	ACT
MEMBERS	MEDIA	FOUNDATION
CLINIC	U.S.	JUDGE
NATIONAL	WOMAN	PLANNED
PETITION	MEN	REPRODUCTIVE
VIOLENCE	PRESIDENT	EXTREMIST
GIRLS	CHIEF	PARENTHOOD
MEDIA	WASHINGTON	LAW
CAMPAIGN	CORPORATE	JURY
CONGRESS	ECONOMY	SUPREME
LEADERS	HORSLEY	THREATS
REPRODUCTIVE	FEMINIST	VOTE
STATE		FEDERAL
COURT		HORSLEY
		CIRCUIT
		PRESIDENT
		CLINICS

Table 7-1: Terms used disproportionately by Feminist sites compared to iVillage

Figure 7-2 demonstrates the predominance of Home/Family and Lifestyle terms in the iVillage site. Women's Enews had strong business coverage. All sites had strong Tech coverage, which was not surprising, given the nature of the article selection. Other than iVillage, NOW had the most usage of terms regarding technology. But the Feminist Majority site had more discussion of health and sex than other sites. NOW.org and the Feminist Majority site were equally strong in the Activism area. None of the feminist sites focused on sports, gaming, or gambling, in the ways in which Askmen did.

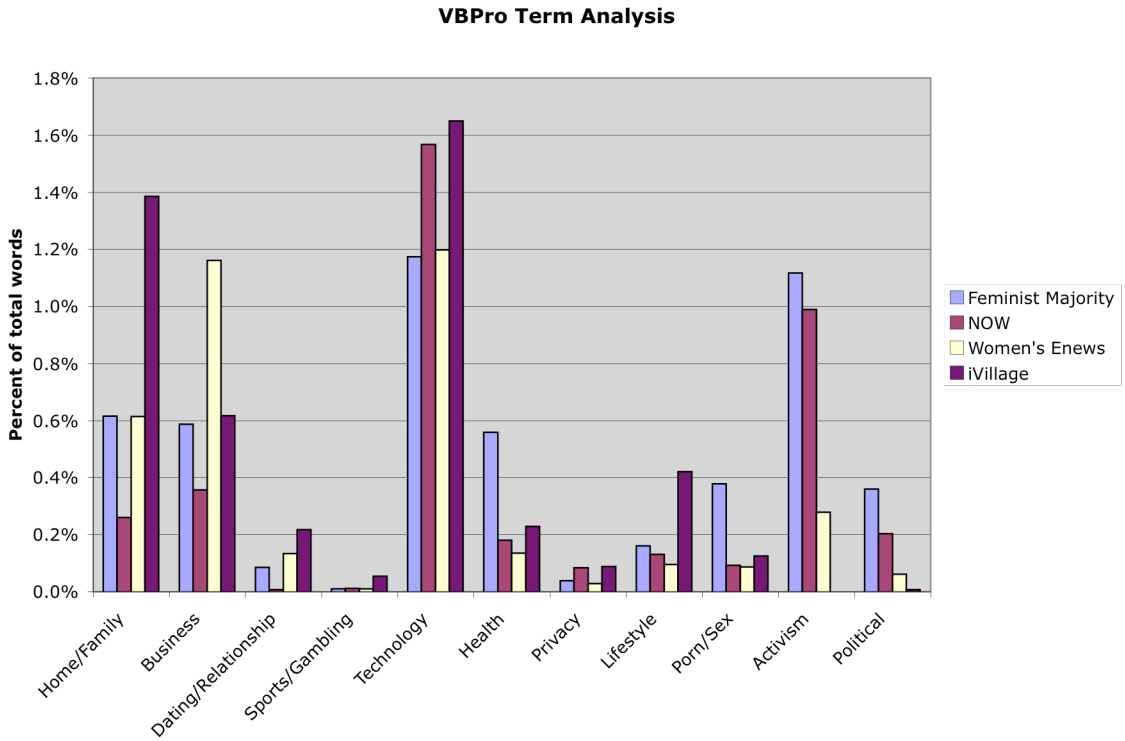


Figure 7-2: VBPro term analysis as a percentage of total words on Feminist sites and iVillage

An analysis of the significant differences in frames in comparison with iVillage further indicated the prominence of certain frames on the Feminist sites. Both the Feminist Majority and NOW sites showed significant differences in the Home/Family and Dating/Relationship frames. The Feminist Majority site showed significant differences in all frames but two (Health and Porn/Sex). The Women's Enews site was more similar to iVillage in terms of the Home/Family and Dating/Relationship frames than other Feminist sites, but its focus on Business produced significant results in that frame. Each of the three Feminist sites had significant differences in comparison with iVillage in the Activism and Political frames.

VBPro Analysis - Differences by Frame Compared to iVillage

	Fem. Maj.	t-test p-value	NOW	t-test p-value	Enews	t-test p-value
Home/Family	0.77%	0.00	1.12%	0.00	0.77%	0.82
Business	0.03%	0.00	0.26%	0.17	-0.54%	0.00
Dating/Relationship	0.13%	0.00	0.21%	0.00	0.09%	0.27
Sports/Gambling	0.05%	0.02	0.04%	0.06	0.04%	0.16
Technology	0.48%	0.00	0.08%	0.62	0.45%	0.08
Health	-0.33%	0.90	0.05%	0.92	0.09%	0.75
Privacy	0.05%	0.04	0.00%	0.88	0.06%	0.55
Lifestyle	0.26%	0.02	0.29%	0.08	0.33%	0.15
Porn/Sex	-0.25%	0.78	0.03%	0.75	0.04%	0.51
Activism	-1.12%	0.00	-0.99%	0.00	-0.28%	0.01
Political	-0.35%	0.03	-0.20%	0.00	-0.05%	0.00

Table 7.2: T-test of significant differences by frame for Feminist sites compared to iVillage

In analyzing the Activism frame more carefully amongst the Feminist sites, Figure 7-3 depicts that the Feminist Majority site had the most discussion of Abortion, using the term "anti-abortion" much more prevalently than the other sites and never using the term "pro-life." The NOW site used terms associated with Feminism almost as much as the Feminist Majority. The Women's Enews site had much fewer usage of both "feminist" and "abortion" related terms than the other two, clearly more interested in other topics, i.e. business and technology issues.

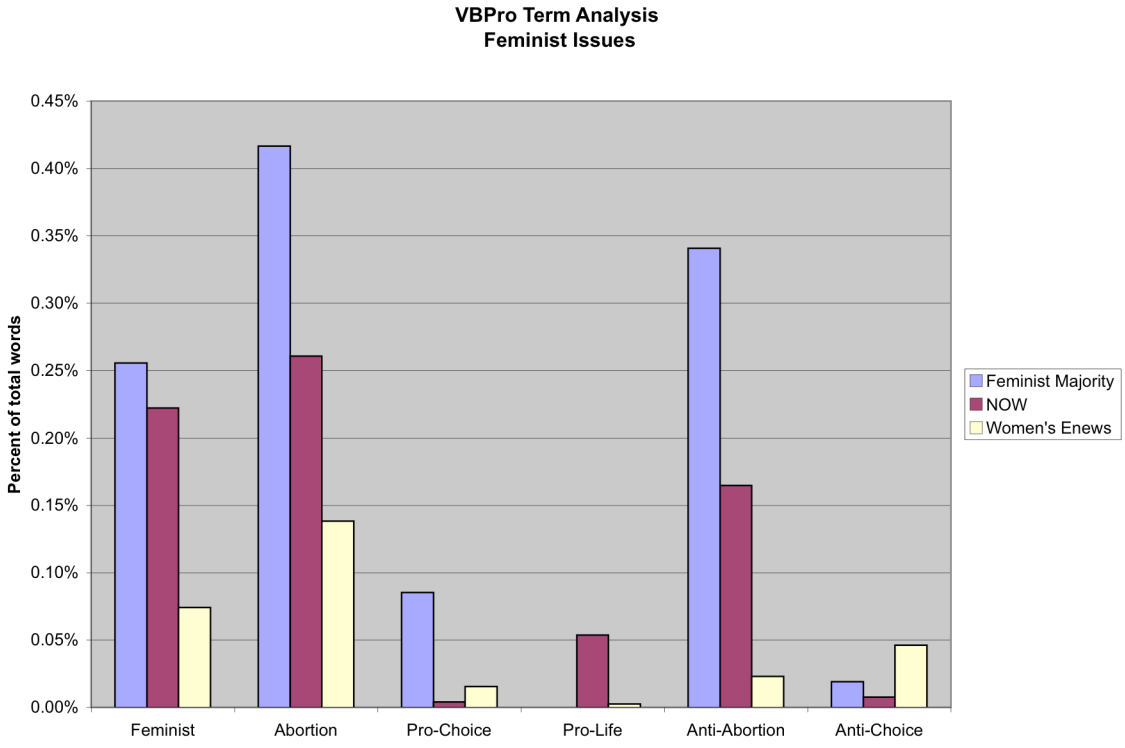


Figure 7-3: VBPro term analysis on issues unique to Feminist sites

DISCUSSION

An analysis of articles on the feminist sites yielded subtle nuances that underscored the focus of each. The Feminist Majority site had the most articles on the subject of Abortion, primarily from a legal perspective ("Supreme Court Lets Stand Pro-Choice Victory," 2003; "Anti-Abortion Extremist Denied Appeal on Order to Shut Down Websites," 2002). The NOW site was more concerned with general activism around a variety of topics including using the Internet to organize a Virtual March ("NOW Launches New Web Site with First Feminist Virtual March," 2000), using the Internet as a tool for social change ("Great Lakes Region Internet Action," 2004), or identifying

Internet resources for activists (Stapleton-Gray, "Useful Net Resources…," 2004). The largest frame for Women's Enews was the Business frame, primarily focused on small business issues (Huff, 2000) and women's equality in corporate America (Farmer, 2002). What they each have in common is discussion of women's issues in the public sphere offering a space in which Fraser's "subaltern counterpublics" could be investigated (Fraser, 1992, p. 123).

Noteworthy differences existed in comparing iVillage to the feminist sites, similar to the differences found in the analysis comparing print publications *Better Homes and Gardens* and *Ms. Magazine* in Chapter 4. While the role of women as mothers was often addressed in regard to their usage of Internet technology on the feminist sites, it was done so in ways that were more diverse than on the iVillage site. In coding the lifestyle sites, articles on Internet filtering were included in the Home/Family frame, because the emphasis was on protecting children. However, the filtering articles found on the Feminist sites had more to do with understanding censorship issues and were included in the Legal frame. For example, an article found on the Feminist Majority site discussed the U.S. Supreme Court ruling in 2003 that Congress can require public libraries to use Internet filters on their computers, upholding the Child Internet Protection Act of 2000. The dissenting opinion of Ginsburg, Stevens, and Souter pointed out that filters could limit access to information other than pornography, like sites dealing with family planning and sexual health. The focus was primarily on the issue of censorship ("Supreme Court Rules 6-3 for Internet Filters at Libraries," 2003).

Women's Enews had an article that explained how certain filters block potentially useful health information sites. This article stated "that many poor families who rely on public library computers for information are often the same ones who lack access to health care and health insurance, and might even be some of the sickest and neediest cases" (Woznicki, 2002). The NOW site specifically had an article explaining the problem of certain Internet filtering programs blocking the NOW.org site (Stapleton-Gray, "Cybersitter Blocks Now Web Site," 2004). On iVillage, however, the articles on filtering software did not include any discussion of censorship issues or the fact that filters might deny access to legitimate sites. One article even emphasized that filters were imperfect and might still allow certain "bad sites" to be accessed ("Staying Safe Online…," 2004).

Additionally, the feminist articles explained the intricacies of the Communications Decency Act ("Supreme Court Rules Communications Decency Act Unconstitutional," 1997) and the Child Online Protection Act ("Internet Pornography Law Blocked by Supreme Court", 2001), both Acts were considered to protect children but found to limit free speech. Child pornography was the subject of several articles, but the focus of these articles was primarily on legal strategies for punishing the pornographers or sex offenders, as opposed to iVillage's emphasis on ways to avoid becoming victimized ("Child Pornographers Identified in Internet Sting," 1997; Smith, 2003). In some cases, the articles alerted women to challenges to existing legislation, as in the consideration of the right to privacy for sex offenders whose names are listed on

the Internet ("Supreme Court to Hear Challenges to Megan's Law," 2002; "Michigan Sex-Offender List Declared Unconstitutional,"2002).

The challenge of childcare for working mothers was particularly the focus of the Women's Enews site, addressing such issues as the unequal representation of women in telecommunications and science careers. One article said "it is also important to put in place 'family friendly' policies that encourage women to stay in their jobs after they've had children" (Taylor, 2001). Another article addressed the ways that family obligations can impact a woman's career. "According to the National Science Foundation, women were more likely to be employed irregularly, due to family-related reasons, such as the demands of a spouse's job or the presence of children" (Lombardi, 2000). Only one article on Women's Enews discussed mothers using the Internet for a work-at-home strategy. But, in addition to allowing more time with children and family, this article listed other benefits to women, citing a 1998 study by the Center for Women's Business research. "The corporate environment was another reason for the rise in mom-owned businesses, according to the study. While men tend to be lauded when they leave a meeting to pick up their children, women are criticized" (Voss, 2002). This article also emphasized the contributions made to the economy by women-owned businesses. "Women business owners create jobs at twice the rate of their male counterparts," said Wendy Werkmeister, president of the Wisconsin Women's Business Initiative Corporation. "Two-thirds of jobs created are at small businesses. When you combine those numbers, you see some great things" (Voss, 2002).

The feminist sites did not use the same profile strategy that was found on iVillage, which tended to feature women working in the home. On the Enews site, one article discussed an organization that was dedicated to "recruitment and retention of women throughout Microsoft" (Buscher, 2001). Another article discussed an all female, African-American team at Harvard Business School that was devising a new corporate strategy for AOL Time Warner (Day, 2002). Enews also had an article that spotlighted several women that were designated as innovators in Web and Internet technology, citing the lack of presence of women on general technology award lists. "There were lots of top-200 lists and awards for people in technology, but there weren't many women represented," said Lara Thurman, executive director of San Francisco Women on the Web (Schaadt, 2001).

Like iVillage, none of the articles on the feminist sites dealt with using the Internet for investments or stock advice. But one article on Women's Enews dealt with an online banking service targeted at gay and lesbian business owners ("New Online Bank for Gay and Lesbian Entrepreneurs," 1998). iVillage did not address any issues of sexuality in the articles under study.

Articles on the issue of abortion were found on each feminist site, but none were found on the iVillage site. One prominent issue covered on all three sites in regard to abortion was the Nuremburg Files case in which an anti-choice Web site, run by abortion opponent Neal Horsley, was removed by Internet service providers. The site was deemed to cross the line of free speech into the area of intimidation and violence ("Ninth Circuit Re-Hears 'Nuremberg Files' Case," 2001; Clarkson, 2003; Prussel, 2001). Other articles

dealt with the way that anti-abortion extremists were using the Internet ("Anti-Abortion Extremist Pleads Guilty in Internet Case," 2001) and legal decisions regarding abortion rights for women ("Lawmakers Announce Bill Repealing Internet Gag Rule on Abortion," 1996; Guillory, 2004).

Other legal issues that were addressed on all three sites included harassment and abuse ("Women's, Human Rights Groups Use Internet to Fight Abuses," 1998; Evans, 2004; "Web Site Harasses High School Girls," 1997). These issues have generally received short address in mainstream media. Two articles on the Enews site dealt with abuse of women from other countries that come to the U.S. as mail order brides through Web sites, focusing primarily on legislation meant to protect women in these situations (Loder, 2003; Palchikoff, 2001).

Other issues of activism addressed on the sites included using the Internet to start a NOW chapter ("Creating a Web Site for a NOW Chapter," 2004), using online resources in support of activism (Stapleton-Gray, "Net-working for Activists…," 2004), and using the Internet for information on politics and voting ("MoveOn.org PAC Primary Finds Dean at Top," 2003; NOW/PAC Put Voters' Guide, Video and More Online," 1996; Stapleton-Gray, "Lobbying Congress…," 2004).

In regard to lifestyle, significant differences also existed. While the iVillage site discussed the usage of the Internet for online bridal registry ("Online Gift Registration: Get the Facts," 2004), the Women's Enews site discussed the ways that bridal media commercialized images of marriage. "These magazines are little more than wish books in fashion and home furnishings supplemented by Web sites linked to advertisers"

(Gibbons, "Bridal Media Promote Merchandise…," 2003). In general, the feminist sites had several pieces that were reflective of media's potential and challenges in regard to women's issues. The Enews site had the following passage regarding women's online media.

> In the feminist-periodical field, the news is both happy and sad. As some publications of the modern feminist era sign off, new ones appear, most often on the Internet, where their potential reach is far beyond what could have been envisioned by editors in the 1970s, lashed to their mimeograph machines, mailing labels and stamps that needed licking. The downside of the online boom is the worry that historians will lose a documentary record. Without archives of bound volumes, or even microfilm, researchers of the future will have a hard time tracking trends (Gibbons, "Women's Media Transformed by Internet …,"2003).

Another Enews article dealt with investment in women's media.

> Despite rivers of venture capital pouring into technology and a drastic lowering of barriers to entry, a relative handful of the country's thousands of new media companies are actually run by women. Most women in the exploding Internet industry are still taking a back seat to men, hampered by their lack of access to venture capital and, according to some, their own attitudes toward risk (Messina, 2004).

And, an article on NOW.org discussed the implications for women of the media merger trend. "Information is power and with fewer and bigger conglomerates controlling that information, we are losing valuable voices and perspectives," said NOW President Kim Gandy. "How will women learn about issues important to them if the media chooses to ignore those issues? Media democracy is crucial to the feminist and civil rights movements" (Bennett-Haigney 2004).

The importance of assimilating girls in the fields of technology and business was the emphasis of several of the Feminist Majority articles. One article discussed the results of a report entitled *Tech-Savvy: Educating Girls in the New Computer Age*, released by The American Association of University Women.

> The report demonstrates that, while exhibiting some mastery of simple internet skills, girls are dissatisfied with computer culture as presented to them in schools. They complain about the passivity of their computer interactions, and "they reject the violence, redundancy, and tedium of computer games" ("Expanding Computer Technology to Address Girls' Needs," 2000).

The Enews site included an article discussing the value of girls-only technology centers. "Given the opportunity and a supportive environment, girls demonstrate that they don't inherently lack confidence around technology – they've been lacking access" (Rasmusson, 2000).

All three sites included articles addressing the issue of a digital divide, or the adoption and implementation of technology at different rates by different groups, particularly as it related to women's usage. In some cases, the articles lauded the progress of women online ("Women Outnumber Men Online," 2000; "Online Gender Gap Closing," 1999; "Older Women Go Online," 1998; "Women Begin Closing the Internet Gender-Gap," 1998). But other articles were critical of the limited advancement of women in science and technology (Nobles, 2001; Haller, 2001). One article stated that "women, who constitute almost half of the American labor force, fill only 12 percent of the nation's lucrative jobs in science, engineering and technology," citing Linda Basch, executive director of the National Council for Research on Women (Nobles, 2001).

The feminist sites also displayed a global concern which was not evident on the iVillage site, with each site emphasizing the use of the Internet for global activism in some manner ("Women's Rights Groups Use Internet to Fight Taliban Oppression of Women," 2000; Curphey, 2002; "Activists Use Internet, E-mail to Advocate for Afghan Women's Rights," 2000).

This analysis shows that there are alternative discourses to those offered by the more mainstream, lifestyle sites in regard to how women use Internet technology. The feminist sites, while they have specific goals and purposes in emphasizing activism and women's rights, provide outlets in which women can envision using technology for health information, legal issues, and to participate in women's causes. The Web sites mirror the missions and goals of feminist print media. But while the feminist sites offered an alternative to the light home and lifestyle issues found in iVillage, they provided a more serious look at the effects of technology, particularly in regard to legal issues. The issues of Internet censorship, the legal status of abortion rights, and women's role in science and technology fields are very important topics, but these sites are limited in terms of empowering images of women and technology beyond its usage for activism.

These Web sites are perpetuating the distinguishing of feminist issues as separate from women's issues. Problems with this strategy include the marginalization of these issues and the small audiences that these Web sites glean in comparison to the mainstream sites. But the availability of these discourses shows that there are alternatives to representing women's relationship with technology. Are other discourses available that identify women's relationship with technology that are outside of the mainstream and

feminist realms? Chapter 8 explores spaces that have been created by women that specifically focus on their usage of technology.

Chapter 8: Women's Technology Sites

With the advent and widespread usage of the Internet, many different types of interests have found a home on the Web. It is not surprising that one primary area in which information is found on the Web is technology. Many publications and sites provide technology information, discussion groups, reviews of hardware and software, video game tips and tricks, and other items that appeal to the diverse interests of computer aficionados.

But the early origins of the Internet were dominated by the men who were working with and developing the technology. Technology publications and Web sites, while not overtly so, targeted a male demographic. *Wired* is considered the premier publication that deals with the culture of technology. Published since March of 1993, it has covered the digital revolution in a manner that has both been lauded for its vision and criticized for its libertarian approach. Its extensive Web site not only supports subscriptions of the magazine, but also provides news and archives, and has become the definitive source on the culture of technology.

Not meant for a mainstream audience, *Wired* has offered articles that illustrated and defined techno-culture and digital discourse throughout the 1990s. It is this specific construction of masculinity around technology that has also been a source of criticism. With a targeted demographic of affluent, career-oriented males, *Wired* sought to change the image of computer geek to one of sophisticated intellectual. Using style that is similar to that offered by women's fashion magazines, like glossy covers and advertising

that is complementary to content, *Wired* has been able to create "an ideology that is compatible with certain sexist assumptions and consumption expectations" (Millar, 1998, p.78). This unequal power along gender lines made the publication not only unattractive to women who were interested in technology, but also unfriendly and unwelcoming.

Even though one of the founders was a woman (*Wired* was founded by journalist Louis Rossetto and his partner Jane Metcalfe), and a few of its contributors have been female, the publication never lost its macho positioning. The trouble, according to one contributor, Paulina Borsook, has to do with the imbalance of power in jobs at *Wired*. "Historically, the editorial positions of creativity, power and prestige at *Wired* have been held by men, while editorial pooper-scooper jobs, the copy editors and fact-checkers and everyone else who has to clean up and rewrite copy into acceptable shape for publication, have been largely held by women" (Borsook, 1996, p. 30). While she admitted that women were now being hired to the more prestigious positions at *Wired*, its culture has long taken over, making progress from a women's perspective difficult.

So, why is *Wired* considered such an unwelcoming experience for women? Since it is the bible of techno-culture, it would seem like a valuable resource for women interested in the topics of technology, specifically in regard to issues of the Internet or Web. Leafing through the pages of *Wired,* it is clear to see that most of the people depicted in articles and advertisements are white men. Occasionally, a token female or minority is shown, but the overall emphasis is on developing a close knit association with technology and affluence.

Women have rarely graced the cover of *Wired*, and, when they do, it is often as a character or symbol as opposed to a real human. In February 2004, a nameless woman dressed in Indian garb was the cover for the story "The New Face of the Silicon Age." In 2003, two film characters graced the cover of *Wired,* Jada Pinkett Smith as Niobe in *Matrix* 2 (May 2003) and Uma Thurman as her character in *Paycheck* (December 2003). Also, in September 2003, a nameless woman covered in synthetic diamonds accompanied the cover story "The New Diamond Age." In 2001, an anime woman was the cover for the issue on Japanese technology (September 2001). The exception is two cover stories on women in technology, one on noted sociologist Sherry Turkle (April 1996) and one on musician Laurie Anderson (March 1994). With the recent progress of women in the Internet revolution, it seems odd that not one woman was worthy of a cover story in the past eight years.

Other technology publications and sites exist, like the product review site CNet.com. Magazines for every aspect of computer culture are available, such as *PC World, Computerworld,* and *MIT Technology Review*. But, like *Wired*, they also target a primarily male demographic through visuals, advertising, and content that is geared toward men's usage. While many women read visit sites, their ability to capture the spirit of women and technology is limited by this focus.

As a response to the male dominated realm of technology publishing, women interested in technology have made their mark on the Web on many sites. The Internet allows a space free from the constraints of conventional publishing, and women have created their own sites to discuss technology issues in a manner that is different from the

ways that the general technology publications and sites do by catering to a male demographic.

RESULTS

A search of Google's Directory yielded the category of "Society > People > Women > Science and Technology > Computers and Internet" that provided links to 18 different sites dedicated to women's use of the Internet. Subcategories under this area included those on technology pioneers (Grace Murray Hopper and Ada Lovelace), Mentoring Programs, Organizations, Web Design and Development, and Web Rings (communities of Web sites that are linked together on a common topic). The sites cover many different interests. Some focused on women in the IT field or in technology organizations. Others are focused on gender inequity in computing. And many are focused at younger women or what can be termed the "grrl phenomenon," named such because of the way that the term "girl" had been hijacked by pornography sites that objectified women.

Two sites included on the main list were Digital Divas (digitaldivas.com) and Cybergrrl (www.cybergrrl.com). These were chosen for analysis because they provided news and information on technology that was regularly updated. An additional site, Girlgeeks (www.girlgeeks.org), was selected from the Science and Technology directory above Computers and Internet because it also was a site dedicated to women and Internet technology that had articles dealing with a variety of technology issues.

Thirty-two articles were analyzed for Digital Divas, 30 for Cybergrrl, and 20 from GirlGeeks. The same search string was used as when looking at iVillage and the feminist

sites, "Internet OR Web OR online." In the case of Digital Divas, all data from its articles section was captured.

In categorizing these articles, it was found that Cybergrrl had the most diverse selection of articles dealing with Internet technology. Cybergrrl had entries in seven categories, Tech, Business, Home, Activism, Health, Privacy, and Lifestyle. Digital Divas was most focused on Technology, but also had articles dealing with Business and Lifestyle. Girlgeeks was the most focused, having articles only in the Business and Technology segments. Figure 8-1 illustrates the distribution of frames by article.

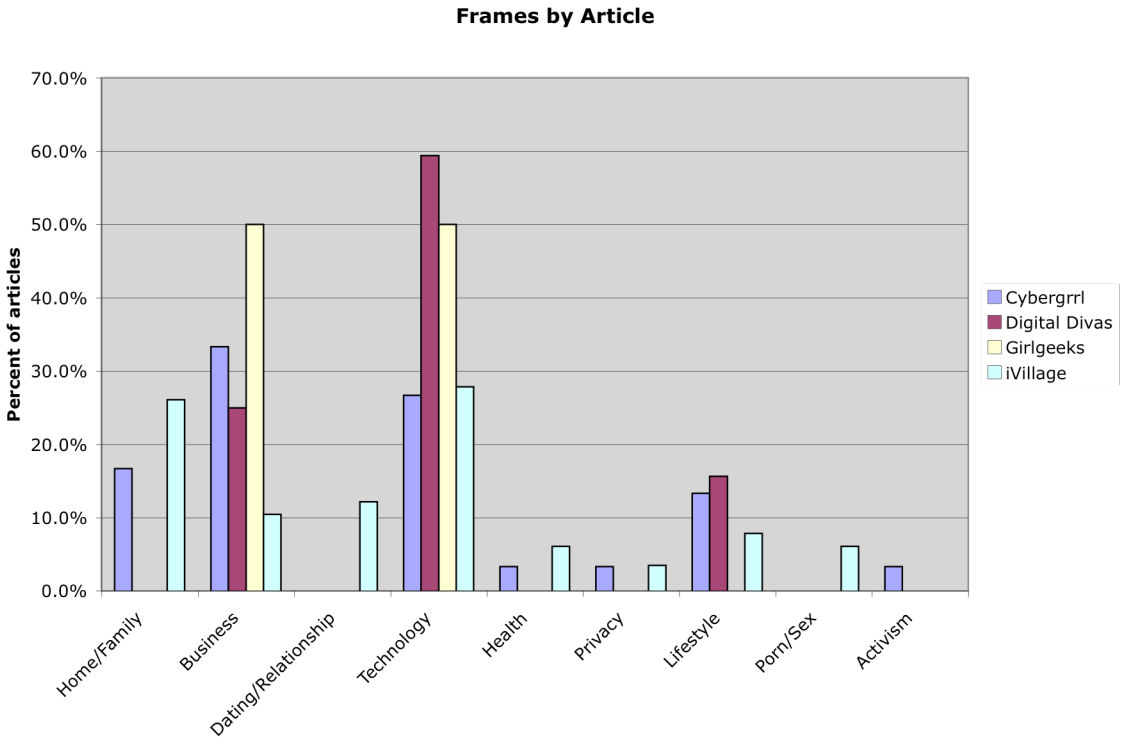


Figure 8-1: Frames by article as a percentage of articles on Women's Technology sites and iVillage

An analysis of terms used disproportionately on the women's technology sites with those of iVillage is in Table 8-1. This analysis shows a general abundance of technology-related terms on these sites over those on iVillage. The Digital Divas site shows a concern with community membership and social phenomena in terms like "Ebay" and "Paypal." It also shows a focus on legal issues in regard to terms used like "Court," "Patent," "Trademark," "Intellectual," "Defendants," "Appeals," and "Infringement." The Cybergrrl site shows a preponderance of terms associated with self-publishing, and the GirlGeeks site was concerned more with technology certifications and computer networking applications.

Digital Divas	Cybergrrls	GirlGeeks
ENTREPRENEUR	SELF	DATABASE
COURT	CAMP	WIRELESS
PATENT	TRAVEL	NETWORKING
TRADEMARK	JENNICAM	LAN
PAYPAL	CYBERGRRL	CISCO
JOURNAL	GIRLS	SYSTEMS
FLASH	PUBLISHING	PROJECT
COMMUNITY	CAMPS	CONTENT
MEMBERS	PROJECT	STAFF
EBAY	SELLER	EXAM
APPEALS	VOLUNTEER	NETWORK
JAVASCRIPT	EMAIL	CERTIFICATION
DEFENDANTS	APARTMENT	TECHNOLOGY
IMAGE	COLLEGE	AUDIENCE
INTELLECTUAL	SPAM	CERTIFIED
HTML	COPYRIGHT	SOLANA
IMAGES	TOOLS	WOMEN
OWNERS	GOODS	RADIO
INFRINGEMENT	ORDERING	CERTIFICATIONS
LOCKWOOD	PSYCHOLOGY	DRIVEN
XHTML	CLIENT	TEAM
UPGRADE	TECHNOLOGY	WIRED
	LEGAL	WEB
		MANAGEMENT
		DEVELOPMENT
		LANS

Table 8-1: Terms used disproportionately by Women's Technology sites compared to iVillage

In reviewing the usage of terms on each site, it was clear that the language on iVillage was more reflective of the Home/Family frame than on the technology sites (See Figure 8-2). But iVillage's Internet articles did include a significant amount of technology terminology. As with the article analysis, Cybergrrl had more emphasis on home and lifestyle usage than the other two technology sites. The Cybergrrl site had one article on activism that was mostly focused on using the Web for volunteerism. It did not hold any of the activism terminology that was found on the feminist sites, like dealing with abortion or feminism specifically. The only mention of feminism on any of these

sites was on the GirlGeeks site, and it was done in a manner that denied the association with feminism. Kristine Hanna, the founder of Girlgeeks, was quoted with "We are not feminists. Our website is a network of mostly highly specialized women in IT positions who share their experiences and knowledge." (Radler, Christian, 2000).

The highest percentage of the Digital Divas' terms dealt with Business, but with fewer terms devoted to the general area of technology than the other sites. None of the sites dealt significantly with the areas of Dating, Sports, Health, Privacy, or Porn/Sex.

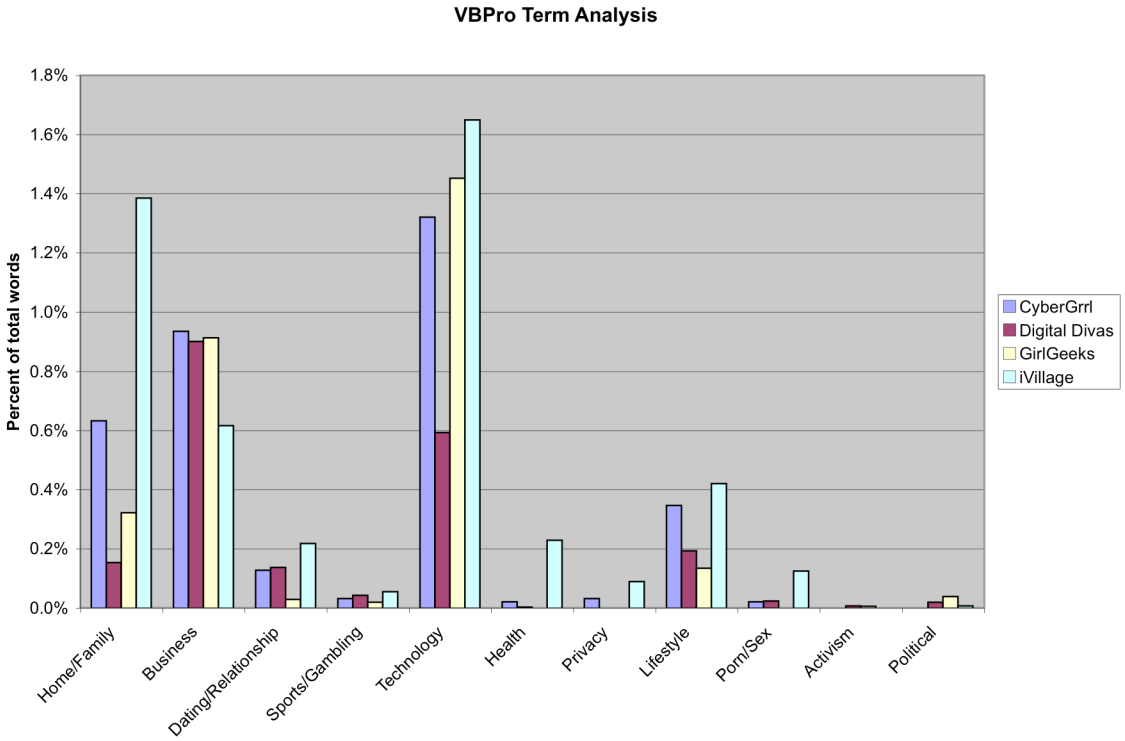


Figure 8-2: VBPro term analysis as a percentage of total words on Women's Technology sites and iVillage

An analysis of the significant differences in frames in comparison with iVillage further indicated the prominence of certain frames on the technology sites. While these sites are focused on technology, the iVillage site showed similar usage of technology terms, even though fewer of its articles were on technical instruction or tips. This indicated that the Women's Technology sites were not using as much jargon or technical description on their technology articles, perhaps due to a higher level of familiarity assumed in the user base. All three sites showed significant differences in the Business frame, indicating these sites' emphasis on using the Internet as it related to technology careers. Both Digital Divas and GirlGeeks showed significant differences in the Home/Family frame, but Cybergrrl did not. This illustrated that Cybergrrl was more like iVillage in including terms dealing with family and children. Similar trends existed in the Privacy frame, in which Cybergrrl reflected more of a concern for privacy, similar to iVillage, than the other two sites.

GirlGeeks showed more significant differences in frames from iVillage than the other two sites, mostly due to their specific focus on the Business and Technology frames. None of the Women's Technology sites showed significant differences in either the Activism or Political frames, highlighting their similarity to iVillage in their lack of attention to these areas.

VBPro Analysis - Differences by Frame Compared to iVillage

	Cybergrrl	t-test p-value	Divas	t-test p-value	GirlGeeks	t-test p-value
Home/Family	0.75%	0.32	1.23%	0.00	1.06%	0.01
Business	-0.32%	0.00	-0.28%	0.00	-0.30%	0.00
Dating/Relationship	0.09%	0.94	0.08%	0.54	0.19%	0.02
Sports/Gambling	0.02%	0.97	0.01%	0.56	0.04%	0.59
Technology	0.33%	0.29	1.06%	0.08	0.20%	0.08
Health	0.21%	0.19	0.22%	0.13	0.23%	0.12
Privacy	0.06%	0.44	0.09%	0.01	0.09%	0.01
Lifestyle	0.07%	0.63	0.23%	0.70	0.29%	0.47
Porn/Sex	0.10%	0.05	0.10%	0.11	0.12%	0.00
Activism	0.00%	n/a	-0.01%	0.32	0.00%	0.33
Political	0.01%	0.10	-0.01%	0.20	-0.03%	0.15

Table 8-2: T-test of significant differences by frame for Women's Technology sites compared to iVillage

DISCUSSION

While all three sites held an abundance of technical how-to articles, some overall trends existed differentiating the sites. For example, Digital Divas had a legal focus that was embedded in many articles. Articles with titles like "Can Small Businesses Fight Back On IP Issues?" (December 2002), "Victory For The Little Guy in Entrepreneur Ruling" (March 2002), and "More Small Businesses Fall Victim To Patent Gouger" (November 2002) were categorized in the business frame, but had a distinct legal slant in helping small businesses understand the legal complexities of the high tech world. Many Digital Diva articles dealt with the challenges of small businesses in defending themselves against copyright claims of larger companies. "There needs to be some kind of process put into place that will make defending themselves against intellectual property lawsuits less punitive for small businesses – especially when they are forced to go toe-to-toe with corporate giants" ("Can Small Businesses Fight Back On IP Issues?" December 2002). In giving voice to small business, these sites provided communities of support in helping business owners understand their rights. "The bottom line here is that small businesses are being victimized by a system that is good at helping inventors and creators to protect their intellectual property, but is not well structured to protect anybody from frivolous lawsuits" ("More Small Businesses Fall Victim To Patent Gouger," November 2002).

Digital Divas also had an emphasis on maintaining and publishing a Web site ("The Demanding Website," September 2002; Say Hello Wave, Goodbye - Outgrowing Your Website, April 2002). Some items provided suggestions for improving the usability

of a site. “Basically, if your site makes too many demands that visitors can’t or won’t fulfill, they won’t stay to see what you’re offering” (The Demanding Website, September 2002). Digital Divas also had articles on drawing traffic to your site (“Build It and They Will Come: or Where are my Clients?” 2001; “Shoe-String Advertising,” 2002). A series on “sticky” Web sites provided suggestions for creating commercial and non-commercial sites that users would want to spend time surfing (“Sticky Websites: Non-commercial Websites,” 2001; “Sticky Websites: E-Commerce, 2001”), Other articles provided technical how-tos, including securing the bandwidth of a site (“Preventing Bandwidth Theft with .htaccess,” 2002) and preventing images from being indexed by search engines (“Keeping Your Images From Being Indexed,” 2001).

The Cybergrrl site’s focus on self-publishing was evident in several articles including “Is Stephen King Opening Doors for You?” (2000) and “Suggestions for Successful Self-Publishing” (2000), but also offered a legal angle, this time from a general Web publishing perspective as opposed to a business view (“Copyright Infringement: Is It Legal to Borrow Website Images?” Feb 15, 1999). Many of these articles were written in a casual, first-person style, describing one individual’s experiences and providing suggestions for others. For example, in an article on publishing a book online, this advice was given.

> This is opening up opportunities for every aspiring writer, but beware: You may be thinking, “If Stephen King did it, so can I.” I don’t want to stand in the way of your unbridled enthusiasm, but do consider a few things before launching 90,000 pages of your first novel online (“Is Stephen King Opening Doors for You?” 2000).

In this way, these sites were more like a community than a content-based site.

Cybergrrl had a series of profiles that highlighted women across a broad range of technology careers including tech executives ("Meet Tami Zori, General Manager, Silicon Alley Connections," 2000), marketing consultants ("Meet Joan Holman, Internet Marketing Maven," 2001), and business owners (Meet Lena L. West, Founder and CEO, xynoMedia Development," 2001; "Meet Karen Shelton, President/CEO of T&S Software and Hair Boutiuqe.com," 2000). These profiles followed a standard interview format highlighting education, the individual's career path, and technology tips.

Cybergrrl had the most significant presence of the technology sites in the Home/Family frame. These articles focused on the importance of technology in the lives of children and the ways in which it can bring families together. In "Computer Camp for Kids," the article emphasizes the purpose of these camps.

> Computer camps are not places where the kids spend all their time in front of the computer surfing the net, chatting with friends on IM, or playing video games. Sure, they will do that, but it's really a place where kids can learn from a young age into their teen years why computers will be important for their future (Quinones, 2001).

Another article provided strategies for discussing technology with children:

> The online world has now joined the topics of conversation that link us to her. And through those conversations we continue to set limits, advise on safety, and learn more about her and the technology geared to her generation. Who did she meet today online and what did they talk about? What sites really appeal to her and which are only selling her something? How is she being marketed to? And why? (Hartmann, 2001)

Cybergrrl offered articles identifying sites of interest to mothers, and recognized different family situations by highlighting online resources for single parents in one segment. “After many years of giving my time in volunteer efforts to children in single parent families, I can only say that these individuals deserve a world of support… The following links serve as wonderful examples of what can be achieved with the power of positive thinking and faith in a single world” (Regan, 2000).

The Girlgeeks site had a general emphasis on highlighting the accomplishments of women in technology. Its columns “Women Who Inspire Us” and “GirlGeek of the Week” provided venues for featuring women entrepreneurs and Web designers. Many of these articles emphasized the role that technology played in arriving at their current position.

> Then, I fell in love with the Internet. I started learning HTML, Photoshop, and Illustrator and began writing a weekly column entitled “San Francisco at Night” for a Web zine called Coolgrrrls.com. I invested in a home computer, scanner and digital camera, and started working for a startup company that offered training and consulting on Adobe software. What fascinated me though, was the juncture where the entertainment world and the Internet met. I began researching music-oriented companies in this arena, and my efforts to promote the Coolgrrrls Website taught me about the wonderful world of email networking, cross-links, and Internet searches (“Girl Geek of the Week, Kiki Hernandez,” 1999)

Technology articles on this site tended to be more complex than on the other sites including “Fundamentals of Networking”(Fabian, 2004), “An Introduction to Wireless Networking Hardware” (Leland, 2004), “Planning a Database Driven Web site” (Leland, 2004), “Making Sense of Freeware, Open Source, and Shareware: Did Somebody Say Free?” (2004), and “Computer Networking: P2P Explained” (King, 2004). These articles

not only focused on technical knowledge, but on usage and benefits. For example, an article on using a database to drive Web content included the following:

> Simple "database driven" Web sites allow you to view data, first in pre-determined ways and then through interactive mechanisms. The key benefit to a Web database is the separation of the data from its presentation. This separation makes it possible to focus on managing the content of the site without spending time designing and redesigning its presentation. (Leland, 2004)

Lifestyle issues were present on Cybergrrls and Digital Divas, including finding an apartment online (Khambekar, September 2001), Internet ordering of fast food (Khambekar, October 2000), business travel (Khambekar, March 2001), auctions ("PayPal Pushing Users Toward Ebay", 2003), and online journaling (Bicchieri, 2001). One article in Cybergrrl focused on online shopping, but emphasized privacy concerns of consumers by explaining how to tell if a site is secure.

> A page with a secure server connection assures that unauthorized parties cannot access important information you submit and that your privacy is maintained. Secure Sockets Layer (SSL) technology is the standard method of safeguarding information sent over the web to another Internet server. SSL works by scrambling and encoding the information then sending it securely over the network. Secure web pages are distinguished by an unbroken golden key or a locked padlock icon at the bottom left-hand corner of your screen. Normally in an unsecured page, which most pages are, the key will be broken or the padlock will appear unlocked. You can also tell when you are in a secure area because the URL to the left of the colon changes from "http" to "https". Often, your browser will alert you to the fact that you've just entered a secure area on a website as well (Gill, 1999).

The trends found here are not surprising given that these sites are clearly focused on issues regarding women and technology. But subtleties existed in terms of the interest in and enthusiasm toward technology, the direct, yet non-condescending, language used,

and the selection of topics. Each site has defined its focus in a very narrow manner, concentrating on Technology and Business issues around technology. While there was some emphasis on home usage of the Internet and children's issues, they did not provide the same level of attention to those areas found in a site like iVillage.

What this analysis shows is that the Internet provides an important venue for women to create their own spaces and discourses around technology. These spaces can offer valuable insight into legal issues, technical specifications, and women empowered by their usage of technology. On the sites under study, the empowerment of women was discussed outside the frame of feminism, with some sites even denying direct association with feminist ideals, while at the same time espousing feminist concepts. This was indicative of the climate of younger women who identify feminism with older women and reject the term, while at the same time enjoying the progress and benefits afforded by the movement. As Findlen stated, this could be the result of the success of feminism in achieving its ultimate goal of integrating its values in society or the stigma to which the term "feminist" has grown to associate (Findlen, 1995, p. xiv-xv).

But comparisons with both mainstream women's media and feminist media showed that different frames can be created in women-run media when it is free from the constraints of advertising and mass distribution. In many cases, women's technology sites sprang from individual Web sites and were "labors of love" that were conceived without financial or commercial motivation. This allowed for framing of the Internet to be free from the stereotypes found in mainstream media, often the result of seeing women

as a commodity audience that must be reached by stereotypical representations (Meehan, 2002).

But these sites are small and reach limited audiences, so their potential to challenge mainstream discourses is curtailed. The technology area has long been associated with a white, male domain. Technology publications and sites, like *Wired* and CNet.com have a definite emphasis toward men's usage. These publications and sites, in order to draw large audiences, have had to cater to the demographic requests of advertisers, and in so doing, often offered limited representations of women and technology.

The Web continues to offer a venue for women to create and disseminate information about Internet technology. The number and variety of sites, when taken as a whole, can serve to provide a valuable resource to women in regard to their relationship with the Internet. Some sites fold, while others continue, and new ones launch. This provides for an environment that is both dynamic and challenging for women to navigate, but provides great opportunity for information and, more importantly, participation.

Chapter 9: Conclusion

This analysis has covered the various ways in which media help to frame women's relationship with the Internet. Starting with women's media, and then progressing through mainstream women's Web sites, feminist sites, and women's technology spaces, it is evident that women's relationship with Internet technology is complex and dynamic. But with some sites and publications reaching much broader audiences than others, certain frames were dominant, thus steering women's usage of and empowerment with technology in distinct directions.

This project has sought to answer a number of questions. The Internet began as an educational and government technology developed and used primarily by white men in positions of privilege in those areas. Its user base became mainstream over time. To better understand how women came to and learned about the Web, women's magazines from the mid- to late- 1990s were reviewed for representations of technology in women's lives. What was found were frames that supported the mission and values of the respective publications. In women's service magazines, like *Better Homes and Gardens*, women were depicted using the Internet in their roles as wives and mothers, using the technology to help children with homework or protect them from inappropriate online content. This focus on hearth and home was most evident in the title selected for the *BHG* technology column, Tech@Home.

Magazines with different missions provided alternate discourses. Feminist publications like *Ms*. showed women using the Internet and Web for furthering activism

and gaining information about women's health and domestic issues. And *Working Woman*, which is no longer in publication, sought to merge the service and feminist discourses, by focusing on women's work life, but as it related to home and family. But, with *BHG* holding the largest audience of any women's magazine, its representations are influencing the greater number of women.

Did the masculine beginnings of the Internet and stereotyping in women's media influence the ways in which women's Web sites are representing women's relationship with technology? Or, are women's Web sites breaking the mold and describing women's relationship with the Internet in ways that are non-traditional and counter to feminine stereotypes? The primary example of women's sites is iVillage because of its vast audience and powerful partnerships. With its current slogan, "The Internet for Women," it differentiates women's usage of the Internet as separate and distinct from men's. Its technology frames were similar to *BHG*, even though its initial mission and strategy indicated a more inclusive and diverse offering. In iVillage, women's use of technology is portrayed in ways that support its advertisers and partners, with an obvious focus on using the Internet in the home.

Feminist Web sites, like feminist print publications, offer alternative discourses around technology, but also do so in a way consistent with feminist missions and values. The usage of the Internet for activism and information dominated those sites, frames that were completely missing from iVillage. In addition, when the feminist sites discussed similar issues to iVillage, such as Internet filters to protect children from online content, they did so by explaining the broader and more complex issues associated with the topic.

As the Web grew more accessible for publishers, women technologists began finding unique homes on the Web. These sites, while having small audiences and focused content, were able to present images of women and the Internet that were nontraditional and empowering. These spaces have, in some small way, preserved what was once considered the potential of the Internet, to circumvent traditional publishing and provide community spaces, free of bias or stereotyping. But their reach and influence are limited.

So, what should be made of the liberating potential of Internet technology and its potential to challenge hegemonic discourses? Some say this potential has already been lost:

> The most striking change to occur in the late 1990s has been the quick fade of euphoria of those who saw the Internet as providing a qualitatively different and egalitarian type of journalism, politics, media, and culture. The indications are that the substantive content of this commercial media in the Internet, or any subsequent digital communication system, will look much like what currently exists (McChesney, 1998, p. 24).

McChesney and others have argued that the participatory nature of online interactivity has been replaced by broadcast-type, commercial communications from large corporations (McChesney, 1998, p. 24). These communications end up mimicking representations and discourses from previous media rather than challenging them.

This analysis suggests several issues that might contribute to the predominance of feminine stereotyping in regard to women and the Internet.

MEDIA CONSOLIDATION

A problem that is evident from this analysis is that media consolidation, like that which is happening in the print and broadcast arenas, is also occurring online. Companies such as iVillage have created large media conglomerates by buying up competition and partnering with other powerful media companies. The result is large audiences viewing content that lacks diversity and representation of voices. In regard to media consolidation, Robert McChesney wrote that the current global, commercial media system is "a system that works to advance the cause of the global market and promote commercial values, while denigrating journalism and culture not conducive to the immediate bottom line or long-run corporate interests (McChesney, November/December 1997).

For women's media, that means representing technology in ways that fuel commercialism, promote online shopping, present products that reinforce feminine stereotypes like beauty and parenting products, and uphold traditional values of home and family, in order to reach the largest audiences. But McChesney believes that more is at stake than commerce in the media conglomerate environment, and that the underpinnings of American democracy, as envisioned by the founding fathers, are at risk. ''The stakes here are vastly higher,'' than who gets rich, Professor McChesney said. ''It's our journalism. It's our culture'' (Schwartz, February 24, 2002). This view is in line with legal precedents established at the dawn of the mass media. The 1945 Supreme Court decision of Associated Press versus United States stated "that the widest possible

dissemination of information from diverse and antagonistic sources is essential to the welfare of the public'' (Schwartz, February 24, 2002).

Dissenting views that challenge traditional values have become limited online, increasingly found only in remote regions of cyberspace. "All of this could seriously undermine the power women have online," according to Dr. Susan Herring, an associate professor of information science at Indiana University. "If the web becomes a 'feminine,' rather than 'feminist' vehicle, a giant iVillage, so to speak, where hairstyles, horoscopes and love advice dominate, its overall status could decline" (Pleticha, 2002).

But, at least for the moment, some alternatives exist. As shown in this analysis there are feminist sites that provide distinctly different images of women and technology. Traditionally, feminist media have offered alternatives to women's service magazines, but with have struggled with small audiences and social resistance. Many women, particularly those in the younger generations, shun the label of "feminist" and may be hesitant to accept these discourses. While technology sites and publications offer another set of alternative discourses, they typically do so without a linkage to feminist ideals, sometimes, as seen in Chapter 8, even going as far as rejecting them completely. And with the technology publication realm inundated with male-dominated discourses, women's technology sites are marginalized in cyberspace.

The rise of Web logs or "blogs" offers additional opportunities for publishing in many areas including politics and activism. According to Wikipedia (www.wikipedia.org) a blog is "a web application which contains periodic posts on a common webpage." Often presented in diary or journal form, blogs can be of several different types including personal, topical, thoughtful, collaborative, political, and corporate. Many blog publishers utilize template driven software programs to host their blogs. Others are developed using traditional Web publishing skills. The most powerful blogs or those that have garnered the most attention have gained their status because of the number of sites that link to them.

It is difficult to ascertain the exact number of blogs, since there are so many blog hosts and individual Web sites performing blog-like functions. LiveJournal.com tracks

over 5 million blogs and more than 2.5 million of them are considered active (http://www.livejournal.com/stats.bml). Others indicate over 10 million blogs with 56% of them maintained by women (Trimbath, 2004). A study by the Pew Internet and American Life Project found that women were as likely as men to contribute content online (Lenhart, Fallows & Horrigan, 2004). Feminist blogs, like Blog Sisters (www.blogsisters.blogspot.com), offer spaces for discussions of feminist issues. And, Wonkette editor Ana Marie Cox (www.wonkette.com) and Rebecca Blood of Rebecca's Pocket (www.rebeccablood.net) offer insights on politics and current events. But the blogosphere is not without its biases. Technorati tracks the Top 100 blogs based on the number of links to them. Few of those blogs are maintained by women (Trimbath, 2004). This indicates that while women may be eager to contribute to the body of knowledge on the Web, their influence may be limited by gender biases and stereotypes in society. The result could be reduced participation or further marginalization of women's voices in cyberspace.

PROBLEMATIZING SEXUALITY

While not directly addressed in this study, issues of sexuality are often commingled with gender. In most cases, the publications and Web sites that were analyzed here did not overtly address the usage of technology by the gay and lesbian communities. Heterosexual usage is typically implied in media through traditional images of home and family. The exception is in feminist media, but even in this arena, sexuality is given limited coverage. While there are Web sites that are specifically targeted toward gays and lesbians, these sites often group the gay community, diluting the gender issues.

But gender issues are particularly relevant for lesbians. While the gay demographic is often touted as a viable one, the fact that women in general earn less than men is compounded for lesbian couples. Analysis of the 1990 Census for sexual orientation trends revealed "that the seemingly large difference in household incomes is mostly due to the gender gap" (Badgett, 1998, p. 23). In a survey by the Yankelovich Monitor in 1993, lesbian couples had roughly the same household income as households headed by heterosexual women, but only made 93% of gay male-headed household income, and made 88% of heterosexual male-headed household income (Badgett, 1998, p. 21). So, lesbians have particular reason to be aware of the ways that women are represented in their usage of technology.

IMPLICATIONS

The primary implication of this study has to do with prospects for leveling the gender discrepancy in technology education and careers. While women made up more than 50% of high school students in 2001, they accounted for only 17% of the students taking the Advanced Placement Computer Science Test. In 1999, women made up only 31% of the students majoring in computer science, and received only 16% of the PhDs awarded in the field (Cooper & Weaver, 2003, pp. 5). This under representation limits their ability to enter the growing, lucrative field. In the industry, women hold one out of five information technology professional positions. It is estimated that by 2010, 25% of all new jobs created will be "technology oriented" (Cooper & Weaver, 2003, p. 3).

In addition, with technology becoming a driving social and cultural force, without women in the roles of developers and innovators, their voices will be missing. "It is

important for women to use the Internet, but it is also vitally important for them to become innovators within it at every level of technological development," said Gillian Youngs of the Centre of Mass Communications Research at the University of Leicester in England. "As societies become increasingly dependent on technologies like the Internet, access to them, and influence over how they develop, become central to questions of who has most power over how large-scale social change is taking place" (Pleticha, 2002).

An article in *Wired* discussed the need for a switch from a left brain to a right brain emphasis in society, stressing the need for more creative and artistic skills in the knowledge workers of the future (Pink, 2005). The reasons offered for this need had to do with the outsourcing of jobs to cheaper Asian markets, the ability for rote tasks to be performed by computers, and the premium that is placed on beauty and spirituality in a society that is abundant with information. It will be interesting to assess the gender implications of this shift, as more artistic and creative endeavors have traditionally been assigned a soft or feminine value in our culture.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study captured a single point in the history of the Internet. It came at a time when women were equally represented in terms of the access to the Internet, thus reducing the discourse around an Internet gender divide. But what has been uncovered is that there are divides beyond access that effect the ways that women use, contribute to, and are represented within the technology.

It is possible that the potential for agency that the Web is being squelched by social factors that exist offline and that are slowly creeping into our online activities. The

Internet provides space for a variety of discourses across vast geographies, and in general, provides a forum for publication that has fewer barriers to entry than traditional media. In terms of personal homepages and Web logs, the Internet provides anyone who has something to say space to present an alternative to stereotypes found in popular media. If women are not being encouraged to create in cyberspace or are not taking responsibility for their own representations online, the result will be much like the patriarchal representations that abound in print and screen. Even more importantly, if women's voices are marginalized in cyberspace or are not considered relevant, the influence of their contributions will be minimal.

Limitations of this study were primarily related to the lack of longitudinal data available on the sites. Many of the articles were either undated or unsigned, making it impossible to assess trends over time or by source. Unlike news sites, in which timeliness is of the highest importance, the practice of not dating articles is used by many of these sites to increase an article's shelf life or relevance over time. Plus, the nature of the Web allows for articles to disappear without warning, potentially erasing its historical bearing. While access to some archived materials is available through The Wayback Machine at archive.org, its usability was limited to visual design of home pages and overall mission of sites. To combat these issues, future research can be done by engaging with a site over a period of time, capturing and dating materials for longitudinal assessment. But, for this particular study, the lack of longitudinal data was not considered terribly problematic, because the articles analyzed represented what was currently available on each site at that point in time, easily accessible by users.

This study provides a starting point for future research in understanding women's relationship with technology and the ways that women are ultimately represented through technology. Continued research engaging with texts, particularly those in the technology area, is recommended to understand the ways women are either poorly or under represented by this medium. A gender analysis of the blogosphere would provide a deeper understanding of the motivations for women to participate online and how both women and men are making meaning with women's online contributions. This analysis could include both content analyses of existing blogs as well as surveys of bloggers and users.

Further research should include surveys to accompany the framing analysis to determine potential agenda setting effects of these discourses and discover how women are making meaning of them in their lives. It will be particularly interesting to understand the ways that women use different types of gendered spaces and where they go for technology expertise. Additionally, controlled experiments in computer labs can help determine women's motivations and interests in using technology. This research could be focused on how women engage with one or more sites, their attitudes about the discourses they engage on gendered spaces, and how technology information is sought online, including search strategies and resources invoked.

Further qualitative research in the form of interviews and observation projects can highlight some of the subtle gender differences in the ways women are socialized and educated to deal with technology. Studying these difference between heavy and non-

users of specific gendered spaces will help to identify the role these discourses play in identity formation and relationship with technology.

So, while women may be achieving high levels of Internet access that are equal to or, in some cases, surpassing those of men, this research indicates that there are other divides in which we must continue to pay attention. Beyond this look at the way women are represented with technology in media, it is also important to remain cognizant of other issues that can impact technology usage, such as race, class, income, sexuality, and education, that impact domestically as well globally. No longer is there one divide between "haves" and "have-nots" of technology, but multiple divides that must be analyzed, comprehended, and addressed.

Appendix A: Lifestyle and Media-related Sites Not Selected for Analysis

Oprah.com (www.oprah.com) is an online women's resource supporting the media empire of Oprah Winfrey. According to the mission statement on the Facts page of Oprah.com, "it provides people with the personal and lifestyle resources to live their best lives" (http://www.oprah.com/about/press/about_press_comfaq.jhtml). The site includes daily coverage of *The Oprah Winfrey Show* and provides users with extensive expert advice, interactive workbooks, photos, video, inspirational stories, books and product information from the show. Users can purchase tapes and transcripts, email their own stories and ideas for show consideration, send in comments on recently aired programs, purchase Oprah merchandise, and post remarks on several different message boards with topics such as Food, Home, Spirit & Self, Mind & Body, *O Magazine,* and Oprah's Book Club. The site includes links to popular show segments including a complete review of Oprah's Favorite Things, an annual feature highlighting gift products at holiday time, and guides for cooking, entertaining, home decorating, fitness and health. Additionally, daily video highlights from *Oprah After the Show*, aired on the Oxygen Network, can also be viewed on Oprah.com.

Oprah.com averages 45 million page views and 3 million users per month and receives an average of 12,000-15,000 e-mails each week (http://www.oprah.com/about/press/about_press_comfaq.jhtml). While the site is mainly in support of Oprah's television show and magazine, it did not include extensive information and resources regarding the usage of Internet or Web.

Handbag.com (www.handbag.com) was launched in October 1999 and is a joint venture between Boots, p.l.c. and Hollinger Telegraph New Media. Handbag.com was the first women's web site to launch in the UK and is currently the leading site for women.

Handbag.com aims to provide the inside track for busy women online, on everyday important issues like relationships, health, careers and beauty. The site includes expert advice, discussion groups and email, plus tips and articles on everything from fashion to parenting. According to the Web site, the typical Handbag.com user is aged between 25 and 45, with a median age of 33 (http://www.handbag.com/aboutus/). The average user visits Handbag.com three times a month. The site currently garners more than 876,000 unique users per month who visit sections on health and beauty, fashion, money, and shopping.

While Handbag.com had a few interesting articles on the Internet including one on Internet Security and one on starting an online business, there was not extensive coverage of the topic.

Oxygen Media (www.oxygen.com) is a 24-hour cable television network supported by its Web site. The network offers original series by Oprah Winfrey, Isaac Mizrahi, and Carrie Fischer, and airs original programming around women's lives and interests. Founded in 1998 by Geraldine Laybourne, Oprah Winfrey, Marcy Carsey, Tom Werner and Caryn Mandabach, the network is independently owned and now available in

52 million cable households (http://www.oxygen.com/basics/about.aspx). Oxygen.com is primarily in support of its television programming, and does not include additional, extensive original content.

Lifetime Entertainment Services (www.lifetimetv.com) led by President and CEO Carole Black since March 1999, offers entertainment and information programming that advocates a wide range of issues affecting women and their families. According to its mission, Lifetime is "dedicated to using the power of the media to make a positive difference in the lives of women" (http://www.lifetimetv.com/about/index.html). Lifetime serves more than 85 million households nationwide, and is available on more than 11,000 cable and alternative delivery systems (http://www.lifetimetv.com/about/index.html).

Under Black's leadership, Lifetime has increased its commitment to original programming including three original primetime dramatic series with police drama *The Division*, medical drama *Strong Medicine* and dramatic series *Any Day Now*. Launched on February 1, 1984, Lifetime was created by the merger of Daytime and Cable Health Network (CHN). Daytime, operated by Hearst/ABC Video Services, began in March, 1982, as a weekday service featuring alternative programming for women. CHN, operated by Viacom, debuted in June 1982, offering programs on personal and family health, fitness, science and medicine.

Thomas F. Burchill was the President and Chief Executive Officer from 1984 until February 1993, when he was succeeded by Douglas W. McCormick, who is

currently the CEO of iVillage. In April 1994, Viacom sold its share of Lifetime to Hearst and Cap Cities/ABC, now The Walt Disney Company, its other partners in the joint venture that owned the network. Lifetime began using the slogan "Television for Women" in 1995. Lifetime's corporate headquarters are located in Manhattan with studio in Astoria, Queens.

On April 2, 1996, Lifetime launched Lifetimetv.com. The web site provides information on Lifetime programming and includes games, health coverage, and other features that supplement programming content. Women also find fitness advice, horoscopes and newsletters on parenting and managing money. Additionally, Lifetime Online provides discussion boards for women to discuss and share comments on these issues.

Lifetime launched a 24-hour sister service, the Lifetime Movie Network in 1998. Lifetime Movie Network is available in more than 25 million homes across the United States through partnerships with DIRECTV, EchoStar's Dish Network and many cable systems including Time Warner, AT&T, Cox, Charter and Insight. In addition, in August 2001, Lifetime launched Lifetime Real Women, a new 24-hour network with true-to-life programming told from a woman's point of view.

Like Oxygen.com, Lifetimetv.com's content was primarily in support of its programming, with little original content.

MSN Women's Central (womencentral.msn.com) is the women's section of the Microsoft Network portal. Similar in focus to iVillage, the site contains sections on

Home & Food, Beauty, Fashion & Style, Relationships, Career & Money, and Shopping. This section of MSN contained few articles dealing with Internet or Web technology, but the main MSN site contained a technology section that was not specifically gendered.

Women.com (www.women.com) is self described as a place "where you can leave life's pressures behind, kick back and laugh at hilarious dating stories, get the hottest celebrity scoop, check out styles for your home and your closet, talk about sex, take revealing quizzes and amuse yourself with games that women love" (http://www.women.com/entertain/about/pages/0,,286927_286928,00.html).

Women.com, which began as Women's Wire in 1996, became a wholly owned subsidiary of iVillage in 2001. With sections including Sex & Dating, Entertainment, Celebrities, Style & Beauty, and Girl Talk, it no longer provides extensive content that would inform women about the uses of the Internet or Web-related technologies.

gURL.com (www.gurl.com) is an online community and content site for teenage girls. It was founded in 1996 at the Interactive Telecommunications Program at New York University and is now published by iVillage, Inc. The site contains stories, games and interactive content produced with an independent editorial voice. Membership is free, and includes the ability to make contributions to the site, post to bulletin boards, participate in polls, and create profiles. A general purpose site for girls and young women, the site provided some articles on the usage of Internet and Web technology, including topics on usage of computers, online dating and relationships, making Web

sites, and technology gadgets. Often the content was in the form of resource lists or polls, making it difficult to compare with other sites in this analysis. But a few examples of extensive, intelligent content around Internet technology were present, including the Gurl Guide to HTML (http://www.gurl.com/findout/guides/pages/0,,625093,00.html) and the Gurl Guide to Building a Web site (http://www.gurl.com/findout/guides/articles/0,,605406_648306-1,00.html).

BellaOnline (www.bellaonline.com) is an online Network created by women for women. Known as the "Voice of Women on the Web," BellaOnline's mission is to be the Internet's leading resource for women. Through members and hosts exchanging ideas, offering encouragement, sharing interests and advice, BellaOnline provides solutions to the everyday and the complex through information, communication, entertainment and e-commerce.

BellaOnline hosts several channels or sections, catering to specific areas of knowledge, expertise, and passion. These channels include topics like Beauty & Self, Books & Music, Auto, Computers, Careers, Health & Fitness, News & Politics, Sports, TV & Movies, and many more. The channel hosts function as community leaders within their topics. In addition to publishing original feature articles, hosts post personally reviewed links Web sites, moderate discussion areas and chat rooms, recommend books and interact via e-mail.

Concerning Women (www.concerningwomen.com) is an e-zine presenting information-based features geared to women on topics such as health, alternative medicine, fitness, finance, business environment, working mothers etc. Concerning Women was created as the bridge for communication of women's concerns. Articles revolve around a theme or woman role model who is considered to provide a unique perspective in understanding of today's issues.

Ms Magazine Online (www.msmagazine.com) supports the print publication *Ms. Magazine*. *Ms*. was launched as a "one-shot" sample insert in *New York Magazine* in December 1971 and soon became the first mainstream feminist publication, offering an alternative to the mainstream women's press issues of home, family, and beauty. Instead *Ms*. has carried articles about women's health, sexuality, rights, feminism, and equality.

Ms. has consistently faced down financial instability and advertiser resistance. From 1978 to 1987, *Ms*. was published as a nonprofit magazine through the Ms. Foundation for Education and Communication. In the ensuing decade and a half, *Ms*. has had four different owners and has adopted its current advertising-free model.

On December 31, 2001 the Feminist Majority Foundation, run by president Eleanor Smeal, assumed ownership of Ms. through Liberty Media for Women, LLC. A consortium of feminists-including Marcia Gillespie and Gloria Steinem, as well as businesswomen, students, philanthropist, and activists-had been publishing *Ms*. under Liberty Media since 1998.

Ms. operations are now located in the offices of the Feminist Majority Foundation in Los Angeles and Arlington, VA. *Ms*. continues to be an award-winning magazine recognized nationally and internationally as the media expert on issues relating to women's status, women's rights, and women's points of view (http://www.msmagazine.com/about.asp).

Ms. *Magazine* Online supports the subscriptions of the magazine, but also provides content on issues such as politics, art & culture, legal issues, and other topics. Selected topics from the magazine and archives of back issues are made available online. The Feminist Daily Wire is a news service that provides news to the *Ms*. *Magazine* site. It is the same service that is used by the Feminist Majority Web site.

Feminist.com (www.feminist.com) is a grassroots, interactive community, by for and about women. The site is a portal of resources and information that supports women's equality, self-empowerment, wellness and safety. It features news, original articles, activism alerts, events, anti-violence resources, women-owned business listings, and an advice column.

Feminist.com was launched in December 1995 by a group of women in the fields of law, television, activism, journalism, music, marketing and communications. In December 2002, it became a non-profit organization under the name Feminist.com Foundation. The purpose of the Web site is to support women's well-being by upholding the principles of the motto: "Awareness, Education, Activism and Empowerment" (http://www.feminist.com/about/whatis.html). Feminist.com used the same Daily News

Wire service provided by The Feminist Majority Foundation that other feminist sites used.

Webgrrls (www.webgrrls.com) began when Aliza Sherman, president of Cybergrrl, Inc., was looking to network with other women who were working on the Web. After starting her own Internet consulting company in January of 1995 and debuting Cybergrrl, she was unable to find peers in the Internet industry.

Through her Cybergrrl venture, she met and contacted many women in the New York area that were hosting their own Web sites. These email correspondences led to their first meeting in April 1995 at a cyber cafe in New York City. Starting with six women in April, Webgrrls grew to 200 by November 1995. Chapters started forming worldwide after women read about Webgrrls on Aliza's website and asked to start their own chapter. Webgrrls International has grown to more than 100 chapters around the world in countries including China, Japan, New Zealand, Australia, Italy, Germany, France, the UK, Canada and across the USA.

FeMiNa (www.femina.com), also part of the Cybergrrl family, was created in September of 1995 and debuted online to provide women with a comprehensive, searchable directory of links to female friendly sites and information on the World Wide Web. In addition to providing general search features, FeMiNa also features Site of the Month, FeminaMail, and FeminaNet. FeMiNa allows Webmasters to sign up to be a link

in one of its categories or to create another. This community has increased emphasis on sites that recognize and promote women's issues online.

Women in Technology International (www.witi.com) was founded by Carolyn Leighton in 1989 to help women advance by providing access to - and support from - other professional women working in all sectors of technology. WITI is a global organization focused on supporting women in business and technology.

Along with its professional association of networks throughout the U.S. and worldwide, including Hong Kong, Great Britain, Australia, and Mexico, WITI offers content for individuals that work for a company, the government or academia, as well as small business owners.

WITI products and services include: Networking, WITI Marketplace, Career Services/Search, National Conferences and Regional Events, Publications and Resources, Small Business Programs, Research, Bulletin Boards and more. WITI's goals include providing resources and opportunities for women in technology, transforming media perceptions of women, developing women leaders, and encouraging girls and young women to seek careers in business and technology.

Appendix B: Codebook of Terms for VBPro Analysis

>>HOME<
KIDS
KID
HOME
HOMEWORK
PARENT
PARENTS
CHILD
CHILDREN
FAMILY
FAMILIES
SCHOOLS
SCHOOL
SON
DAUGHTER
HUSBAND
WIFE
SPOUSE
MOTHER
FATHER
PARENTAL
LEARNING
LEARN
EDUCATION
KITCHEN
STUDENT
STUDENTS

>>BUSINESS<
STOCK
JOB
OFFICE
BUSINESS
STOCKS
COMMERCE
INVESTOR
INVESTORS
MARKET
MARKETS
AD
COMPANY
COMPANIES
EMPLOYEES
EMPLOYEE
COMMERCIAL
EMPLOYER
EMPLOYERS
ENTREPRENEURS
ENTREPRENEUR
INDUSTRY
FUND
TRADING
GROWTH
INVESTMENT
WORK

>>DATING<
DATE
SPOUSE
BOYFRIEND
BOYFRIENDS
GIRLFRIEND
GIRLFRIENDS
DATES
DATING
RELATIONSHIP
RELATIONSHIPS

>>TECH<
JAVA
MICROSOFT
TECH
WEBLOG
WEBLOGS
BLOG
BLOGGING
NAPSTER
CABLE
EMAIL
MAIL
ACCESS
MODEM
INFORMATION
PC
DATA
ISP
DSL
COMPUTER
SOFTWARE
TECHNOLOGY
KEYBOARD
CYBER

>>HEALTH<
HEALTH
ADDICTION
DEPRESSION
DOCTOR
DOCTORS
MEDICAL
MEDICINE

>>PRIVACY<
PRIVACY
SCAM

>>LIFESTYLE<
FASHION
MUSIC
BANKS
BANK
BANKING
TRAVEL
SHOPPING
SHOP
BUY
AUCTION
BID
CONSUMER
CONSUMERS
CAR
CARS

>>SEX/PORN<
SEX
SEXUAL
SEXUALLY
SEXUALITY
PORN
PORNOGRAPHY
CYBERSEX

>>ACTIVISM<
ACTIVISM
ACTIVIST
ACTIVISTS
FEMINIST
FEMINISM
FEMINISTS
FEMINISMS
ABORTION
ABORTIONS

>>POLITICAL<
CANDIDATE
CANDIDATES
VOTE
VOTER
VOTING
VOTES
POLITICS
POLITICAL
CAMPAIGN
CAMPAIGNS
CAMPAIGNED
CAMPAIGNING
POLL
POLLS
ELECTION
ELECTIONS

>>SPORT<
GAMBLING
POKER
SPORTS
PLAYER
PLAYERS
CASINO
BETTING
GAME
SPORT
WRESTLING

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